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ABSTRACT

A Performance Analysis for Training (PAT) Model was developed and validated for use in analyzing an organization's performance needs that can be solved with training. The PAT Model incorporated the perspectives of both theorists and practitioners on training needs assessment. Three training needs assessment experts evaluated its content and face validity. The PAT Model was implemented in an organization to determine whether the actual outcomes resulting from the model were valid. Two decisionmakers used the information to make a decision about training. Both confirmed that the predicted outcomes from using the model had been achieved and reported that they had accomplished the following: (1) been involved in the training process; (2) obtained accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of the company; and (3) obtained sufficient information for designing, developing, implementing, and evaluating training. Four experts in training needs assessment rated the effectiveness of the PAT Model and found it useful in determining training needs. (Appendixes, amounting to about four-fifths of the report, include the first draft of the model, event descriptions that detail how the model was implemented, in-process and final reports, subject matter analysis, and project materials and information. There are 101 references.) (YLB)

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TRAINING AND DEVELOPMENT RESEARCH CENTER

Project Number Thirty-Nine

THE DEVELOPMENT AND VALIDATION OF A PERFORMANCE ANALYSIS FOR TRAINING MODEL

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ABSTRACT

The purpose of this research was to develop and validate a Performance Analysis for Training (PAT) Model. The premise for this study was that the lack of a performance-based training needs assessment model grounded in theory and research limited the efficiency and effectiveness of training professionals. The subproblems that were identified included the lack of research on assessing training needs, the difficulty that practitioners have in moving from theory to practice, and the frustrations that needs analysts face when the assumptions of their models and theories do not fit the realities of dynamic organizations.

To address the problem and subproblems, a PAT Model was developed and validated. The PAT Model incorporated the perspectives of both theorist and practitioner on training needs assessment. Three training needs assessment experts then evaluated the content and face validity of the PAT Model.

Beyond the content and face validity, the PAT Model was implemented in an organization to determine whether the actual outcomes resulting from the model were valid. Two decision makers used the information to make a decision about training. Each decision maker confirmed that the predicted outcomes from using the PAT Model had been achieved. Each decision maker reported that (a) he had been involved in the training process; (b) he had obtained accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of MSC; and

(c) he had obtained sufficient information for designing, developing, implementing, and evaluating training.

Utilizing all the PAT Model and research data, four experts in training needs assessment rated the effectiveness of the PAT Model. They found that, in this case, (a) the PAT Model was useful in determining training needs; (b) the results from the PAT Model were appropriate; (c) the perception and prioritization of training needs in the organization were significantly influenced by the characteristics of the organization, the decision makers and the analyst; (d) the phases and steps of the PAT Model worked well together; and (e) the PAT Model was viewed more favorably than other needs assessment models.

This study provides unique research in the area of training needs assessment. It addresses the difficulty that practitioners have in moving from theory to practice by providing a theoretically sound model that includes a conceptual framework, a list of the phases and steps in the process, and worksheets.

Through the development of the PAT Model, this study identified assumptions that fit the realities of the dynamic organizations in which needs analysts work. Beyond that, the detailed description of the process used to implement the PAT Model in a functioning organization provides a source of data for theoreticians and practitioners who want to gain further understanding of the process by which training needs are determined. The case study highlights the dynamic nature of the needs assessment process. From this case study, it is clear that the training needs were not simply identified, but rather were negotiated and rationalized.

CHAPTER 1

INTRODUCTION

In 1988, a U.S. Training Industry Study reported that the budget for formal training in organizations with 100 or more employees totaled $39.6 billion (Lakewood Research, 1988). Clearly, training in business and industry has clearly become big business.

The primary goal of training is to improve individual and organization performance (Rummler, 1987). Brinkerhoff (1987) described how training contributes to the organization. He stated that "with training, the 'route' to impact of value to the organization is through changes in job behavior; for example, participants acquire a new skill, they use it on their job, and, as a result, the organization benefits in some way" (p. 11). For training to be effective in contributing to the organization, careful analysis of the organization's training needs is essential (Mitchell & Hyde, 1979). The focus of this study is on developing and validating a model for analyzing an organization's performance needs that can be solved with training.

Background of the Study

This section focuses on the analysis of training needs as part of the systematic approach to training, and on the organization as the context for both the analysis of training needs and the implementation of training.

Analyzing Training Needs as Part of the Systematic Approach to Training

Using a systematic approach to training can make the complex work of identifying and solving training problems in business and industry more efficient and effective (Swanson, 1987). A number of models have been developed that detail a systematic approach to the process of producing training programs. The models differ slightly, but, in general, they all contain five major phases—assess the needs, design the training, develop materials and instruction, implement the program, and evaluate the training (Rosenberg, 1982; Rossett, 1987).

Assessing training needs is the first phase in the systematic approach, and as such it is the starting point for training. Swanson (1989) pointed out that systematic training in industry and business does not start with the assumption that there is a need for training. According to Swanson, "training begins by questioning the need for improved organizational or individual performance and then further questions the probability that training will influence that performance" (p. 73).

Thus, the focus during the phase of assessing the needs is primarily on identifying those performance issues of the organization that can be solved with training. Careful investigation is required to determine the organization's critical performance needs, the causes of the performance, how the performance needs should be addressed, and whether training is an effective strategy for improving the performance (Georgenson & Del Gaizo, 1984).

Rummler (1987) described the importance of determining training needs. He stated:

> There is no more critical task in the training process. How well this step is done impacts

- the trainees—is the training relevant to their jobs?
- the organization—will this training improve performance?
- the quality of the training program—can we measure the effectiveness of the training course?
- the effectiveness of the training function—does training make a difference? Have an impact on the organization? (pp. 217-218)

Assessing the needs also serves as the touchstone for the other activities of the systematic approach to training (Noel & Hewlett, 1981). The needs assessment phase is an important part of the process of developing training because more and more organizations are evaluating the training function based on the actual performance improvements that result from the training (Georgenson & Del Gaizo, 1984). Evaluation of performance improvements is contingent on beginning the training process with accurate measurements.

The Organization as the Context for the Training and for the Analysis of Training Needs

When training is used as a tool for improving organizational performance, the organization and its environment provide the context for the training effort and for the analysis of needs. To be fully effective, training must fit the organization (Brinkerhoff, 1987). The way that trainers view the organization influences the models or approaches that they use to fit training to the organization.

A growing body of literature portrays organizations not as single unit entities, but, instead, as entities composed of subgroups that interact to negotiate and achieve organization actions. For example, Bacharach and

Lawler (1980) stated that organizations are neither the rational, harmonious entities celebrated in managerial theory nor the arenas of class conflict projected by Marxists. They argued instead that organizations can be viewed as politically negotiated orders. Schall and Shapiro (1989) characterized organizations as

> value-driven, choice-making, stakeholder-impacted, uncertainty-ridden, segmented-but-interdependent systems operating in an environment of scarce resources. As such, they [organizations] can usefully be understood and managed as rhetorical cultures, that is, as systems of values and beliefs which underlie the means by which members and internal groups attempt to influence others in the service of their own preferred outcomes. (p. 1)

Four characteristics of organizations evident in this view are (a) organizations are systems, (b) organizations are cultural entities, (c) organizations are political entities, and (d) organizations are rhetorical entities. This dynamic view of organizations is very different from the views of organizations as rational and harmonious, or as arenas of class conflict. This dynamic view can provide trainers with new insight into how training fits in an organization. It can also provide insight into how the key personnel in the organization and the organization itself can affect the identification of training needs.

Statement of the Problem

McGehee and Thayer (1961) introduced a framework that has served as the basis for organizing and discussing the literature on training needs assessment (Moore & Dutton, 1978; Ostroff & Ford, 1989). Their integrated, systematic approach to thinking about an organization's training requirements includes analysis of the organization; analysis of the job, task, or assignment that the employees must perform; and analysis of the knowledge, skills, and attitudes that employees must develop to perform the tasks of their jobs. McGehee and Thayer also discussed the need for a research approach to needs assessment:

> Training will not come of age until it abandons intuitive approaches to the solution of training problems. . . . Who is to be trained? In what are they to be trained? By whom are they to be trained? How are they to be trained? How are the results of training to be evaluated? . . . In order to approach securing answers to these questions, we must effectively utilize research techniques and methods of investigation. (pp. 22-23)

In spite of McGehee and Thayer's call for a more rigorous approach in 1961, there has been little research and few advances in the field of needs assessment as a scholarly endeavor (Vinton, Clark, & Seybolt, 1983). Moore and Dutton (1978), in a discussion of the advances that have occurred since the introduction of McGehee and Thayer's model, concurred: "Since this integrated, systematic approach was first proposed, the development of needs analysis theory has progressed little further than the expansion, formalization, and creation of specific techniques for collection of data useful in need determination" (p. 535).

Ng (1988) noted that needs analysis as it is practiced is seldom consistent with the models and theories advocated in the literature. In discussing this inconsistency, Ng stated, "When confronted with the reality of a specific situation, practitioners find it difficult to move from the theory to actual applications" (p. 1). He also stated that

> some of the assumptions of current needs analysis models and theories do not fit the realities of the environment within which needs analysts operate. Frustrations result when the desire to employ rational and thorough techniques is incompatible with the demands of reality. (p.1)

In summary, the literature highlights the following problems in the area of assessing training needs: (a) the lack of research, (b) the difficulty that practitioners have in moving from theory to practice, and (c) the frustrations that needs analysts face when some assumptions of the models and theories they are using do not fit the realities of the environment.

Purpose and Significance of the Study

Research that (a) results in a needs assessment theory and model for determining organizational performance needs that training can meet, (b) takes into account the realities of the environment within which a needs analyst works, and (c) guides the practitioner in moving from theory to practice can close the gap between the process of determining training needs as it is articulated in the literature and as it is practiced in business and industry.

The purpose of this research effort was to close the gap between training needs assessment theory and practice by answering the following two research questions:

Research Question 1: Can a performance analysis for training (PAT) model be developed to guide the practice of analyzing training needs in a dynamic organization?

Research Question 2: Given the development of the performance analysis for training (PAT) model, is it a valid tool for determining an organization's training needs?

First, the research effort focused on developing a model for determining the organization's performance needs that considered the effects of the organization, the decision makers, and the analyst on the training needs analysis process and the product. Second, the research effort focused on validating the model.

A validated needs assessment model goes beyond the questions of validity and reliability of the individual data collection methods that might be used as part of a needs assessment to a determination of whether the needs assessment did what it was supposed to do. That is, the validation of the needs assessment model focuses on whether the model could be used to effectively determine the training needs of an organization.

A validated needs assessment model has both practical and theoretical import. As Smith, DeLahaye, and Gates (1986) noted, the lack of an adequate training needs assessment model may result in omissions and misdirected effort. Beyond that, a model is useful because it gives an overview of what is to happen, encourages a systematic and complete process, and highlights aspects of the process that require more effort. Some additional benefits that models can have include the following: (a) explaining various aspects of human behavior and interaction, (b) integrating what is known from research and what is known from observation, (c) simplifying complex human processes, and (d) guiding observation (Nadler, 1982). These benefits of a model would be of use to both practitioners and theoreticians.

Assumptions of the Study

During the planning and implementation of this study, the following assumptions were made:

1. Organizations have specific performance needs upon which people can agree.
2. Organizational performance needs that involve employee knowledge, skills, and attitudes can be identified and translated into training needs.
3. The development of training programs involves a complex interaction of tasks, people, and events that rarely is effected in a completely logical fashion (Caffarella, 1988).
4. The researcher was able to implement the model and to describe the needs assessment process at a sufficient level of objective detail to allow review by the needs assessment experts.

Limitations of the Study

Because validating a needs assessment model within an organization required the collection and analysis of large amounts of descriptive information over a period of time, it was practically and financially impossible to test the model in a number of organizations. The model was, therefore, tested in only one organization. The research was conducted in an organization whose decision makers were willing to support the implementation of the performance analysis for training model.

Definition of Terms

The definitions of the terms used in this study were the following:

Analyst—the individual who manages the process of determining the performance or training needs in an organization.

Culture—the values, norms, rituals, rites, ceremonies, and/or "the way we do things around here" that are based on the group's assumptions about the best ways to cope with problems (Glidewell, 1986).

Decision maker—the individual responsible for making choices about allocating resources to address organization performance needs. In some organizations, one person has this decision-making authority, but in many organizations, a number of people have this authority.

Need—the necessity to close a discrepancy, to satisfy a lack, to relieve a condition, or to do something (Ng, 1988). The definition implies an end-state or goal. It also implies values or judgment (Brinkerhoff, 1986; Ng, 1988).

Needs analysis/needs assessment—two terms that are used interchangeably to describe the process of determining an organization's training or performance needs (Benjamin, 1989).

Nontraining need—an identified necessity for the organization related to closing a discrepancy, satisfying a lack, relieving a condition, or doing something that can be addressed by means other than training.

Organization—a whole entity that has been formed to achieve a purpose. The entity can be characterized as systemic, cultural, political, and rhetorical.

Organization performance need—an identified issue or opportunity for the organization related to closing a discrepancy, satisfying a lack, relieving a condition, or doing something. An organization performance need may comprise both training and nontraining components.

Politics—the use of power to modify or protect an organization's system for distributing resources (Margulies & Raia, 1984).

Rhetoric—communication in which individuals try to change the conditions that they perceive exist around them (Conrad, 1985).

Systems view of organizations—the characterization of organizations as open systems that contain subsystems and exist within still larger environmental systems (Gradous, 1989; Morgan, 1986).

Training—the process of transmitting knowledge, skills, or attitudes (Swanson, 1987).

Training needs—the identified necessities for the organization related to closing a discrepancy, satisfying a lack, relieving a condition, or doing something that can be addressed through the process of transmitting knowledge, skills or attitudes.

CHAPTER 2

REVIEW OF THE LITERATURE

Training is one action an organization can take to improve its human performance. Some other actions include hiring practices and work methods. Assessing training needs, in turn, is one step in the process of systematically developing training programs. Careful assessment of needs helps ensure that a training program is relevant to both the organization and the individuals who require knowledge and skills to perform the organization's work. The first section of this review focuses on the terminology used in the literature to describe the process of determining performance needs for training; the second section focuses on the models for determining training needs that are reported in the literature, and the third section focuses on the fit between the organizational context and the models.

Terminology

This section focuses on how common terms are defined and used in the literature. The common terms, unfortunately, do not have common meanings among training professionals.

Definitions of the Term Need

Understanding how the term *need* is defined is key to understanding the concept of *training needs*. In the literature, however, need has a number of different meanings, depending on the context in which the term is used.

One commonly found definition relates need to a discrepancy or gap in performance and uses the following equation: Desired performance minus actual performance equals need (Briggs, 1977; Burton & Merrill, 1977; Mager & Pipe, 1984; Rossett, 1987). This discrepancy definition implies that there is a goal that must be satisfied. The need defined by this equation is a performance need but not necessarily a training need. In this context, training needs are a subset of performance needs. Before training can be applied as a solution to a performance need, the training and the nontraining components of the performance need must be identified and separated.

The definition of need used in Kaufman and Stone's (1983) Organizational Elements Model is also a discrepancy definition, but one that has a more limited scope. The Organizational Elements Model is used to identify, determine, and justify organizational problems. It has five organizational elements—inputs, processes, products, outputs, and outcomes—which are defined as follows (p. 36):

- Inputs are the ingredients and "raw materials" that are available for use by an organization.
- Processes are the ways and means that the ingredients are used to obtain desired results.
- Products are the internal, en route results that an organization achieves.

- Outputs are the aggregated internal results (assembled products), deliverable or (ideally) delivered to a user outside of the organization.
- Outcomes are the effects that outputs have in and for society

The term *need* as used in the Organizational Elements Model refers to a gap between the current results and the results that should be attained; that is, the term *need* refers to a gap in products, outputs, or outcomes. On the other hand, the term *quasi-need* as used in the Organization Elements Model refers to a gap between what is and what should be for inputs or processes.

Kaufman and Stone's (1983) definition of need is narrower than the discrepancy definition that was described earlier because it does not focus on all the gaps between the actual and the desired performance. Instead, it focuses only on gaps in the results. For example, according to Kaufman and Stone's definition, the gap between what is and what should be for the products that an organization delivers to the customer is a need, but the gap between what is and what should be in the raw materials that the organization uses is not a need. Because raw materials are an input, a gap in raw materials is called a quasi-need.

Discrepancy is not the only basis for defining needs described in the literature. Stufflebeam (cited in Brinkerhoff, 1986) reviewed dozens of examples of needs analyses from different fields of study and identified four useful definitions of need. The definitions he identified are

- discrepancy,
- democratic,
- diagnostic,
- analytic.

In this framework, discrepancy is defined as a difference between an ideal, normative, or expected level of performance and an actual level of performance. The identification of a discrepancy need requires both a measure of actual performance and a quantifiable expected level. Democratic needs are determined by majority rule. The need in this case is what most people prefer, select, or otherwise vote for. Diagnostic needs are defined through causal analysis and research. For example, when an analysis shows that A is causally related to B (as when A contributes to the achievement of B), then A is needed for B. Analytic needs are discovered by intuition, insight, expert consideration, or enlightenment. As Brinkerhoff (1986) pointed out, "Each definition fits different training situations, leads to different training value bases, and implies the use of different needs analysis methods" (p. 64).

Using each of Stufflebeam's (cited in Brinkerhoff, 1986) four definitions, management training needs in an organization could be determined by (a) identifying the knowledge, skills, and attitudes that most managers say will improve organization performance (democratic needs assessment); (b) using the insight of experts such as internal or external consultants to identify the training that will improve organization performance (analytic needs assessment); (c) analyzing the problem area to determine if lack of training is the cause of the problem (diagnostic needs assessment); or (d) identifying the differences between the organization's actual and ideal level of performance and separating out training components (discrepancy needs assessment). The example emphasizes that the methods for determining training needs (i.e., majority preference, expert insight, research findings, and identified discrepancy) vary depending on the definition of the term *need* that is used.

In addition to the four definitions identified by Stufflebeam (cited in Brinkerhoff, 1986), definitions of need can also be found in the the adult education literature. Mattimore-Knudson (1983) noted that adult educators have defined the term *need* as (a) a biopsychological state in an individual that is similar to a drive; (b) a term connoting individual want, desire, and feeling, suggesting a means of gratification and implying an ultimate goal; (c) a norm of some kind or a gap between a desired standard and the standard that actually exists; (d) a means to defend or justify offering a particular adult education program; and (e) such other ways as needs as objectives, needs as requirements or necessities, and needs as obligations.

Clearly, there is some overlap between the definitions of need identified by Mattimore-Knudson (1983) and those identified by Stufflebeam (cited in Brinkerhoff, 1986). But Mattimore-Knudson's definitions also highlight additional ambiguities: the term *need* can be used to refer to a norm, a means, a situation, or an individual state.

The word *need*, then, does not provide information about the basis of the need, or about who or what has the need. In actuality, the term *need* does not have much meaning apart from acting as a referent or referring to a state of affairs (Mattimore-Knudson,1983). Consequently, understanding the intended meaning of the term *need* is a function of understanding the state of affairs to which the word refers. This includes knowing who or what has the need, and what method has been used to determine that the need exists.

While there are differences among the meanings attributed to the term *need*, there are also some similarities. One essential attribute of need appears to be the concept of necessity (Ng, 1988). The necessity can be (a) to close a discrepancy, (b) to satisfy a lack, (c) to relieve a condition, or (d) to do something. The necessity, while most often labeled a need, can also represent an opportunity. For example, an organization that can gain market share by adopting a new technology may view training as both the organization's need and the organization's opportunity. In addition, most definitions also include or imply an end-state or goal that can be satisfied by the need.

The concept of need also implies values and judgment (Brinkerhoff,1986; Ng, 1988). The concept of need suggests evaluation, or assessing the worth, of the components in the situation. The values and judgments of the needs analyst can influence such things as the conditions that are identified as a need, the choice of a needs assessment model, the specific methodology used to collect data, the interpretation of the data, and who is empowered to make the decision about whether a need exists.

Needs Assessment, Needs Analysis, and Performance Analysis Defined

The importance of analyzing needs prior to implementing training solutions is emphasized by a number of theorists (McGehee & Thayer, 1961; Moore & Dutton, 1978; Watson, 1979). The two phrases most often used to describe the process of analyzing needs are *needs assessment* and *needs analysis*. However, there is little agreement in the literature about what constitutes either a needs assessment or a needs analysis (Ng, 1988).

One way in which the terms have been conceptualized clearly differentiates between needs assessment and needs analysis. For example, Kaufman (1986) noted that "needs assessments identify, document, and justify gaps in results, and select the most important for attention. Needs analyses break these identified needs down into their constituent component parts and identify causes for needs" (p. 24).

A second way in which the terms have been conceptualized is that the terms *needs assessment* and *needs analysis* are labels for the same thing. Benjamin (1989) noted that many authors in the organization development/instructional development fields tend to use the terms needs assessment and needs analysis more or less interchangeably. A number of authors concur with using the terms interchangeably (Newstrom & Lilyquist, 1979; Zemke & Kramlinger, 1982).

A third way in which the terms have been conceptualized is that the term *training needs assessment* labels the overarching process, which includes both identification of the need and identification of causes of the need. For example, Rossett (1987) described training needs assessment as an umbrella phrase that encompasses activities like analysis, front end analysis, needs assessment, needs analysis, and discrepancy analysis. She also described training needs assessment as the systematic study of a problem or innovation that incorporates data and opinions from varied sources in order to make effective decisions or recommendations about what should happen next.

A fourth way in which the terms have been conceptualized is that the term *analysis* labels the process that includes both identification of the need and identification of the causes of need. Mills, Pace, and Peterson (1988) used the term *analysis* in this way. They stated that analysis involves all of the activities associated with recognizing the existence of a problem (a difference between what is happening and what should happen) and its causes and consequences, and classifying the problem in terms of what kinds of interventions might reasonably be used to narrow the gap.

In the four conceptualizations that have been described, the terms *needs assessment* and *needs analysis* are defined in different and sometimes conflicting ways. To further add to the definitional confusion, the terms *needs assessment* and *needs analysis* have also been used to describe specific techniques for gathering or documenting information.

For example, Rossett (1987) used the term *training needs assessment* to describe a process. In addition, she used the terms *needs assessment*, *extant data analysis*, *subject matter analysis*, and *task analysis* to label specific techniques for gathering information. In this context, needs assessment is the systematic effort that is made to gather opinions and ideas from a variety of sources on performance problems or new systems and technologies.

The term *needs analysis* has also been used to describe a technique. For example, Mills, Pace, and Peterson (1988) used the term *needs analysis* to label a specific procedure for documenting information. Needs analysis, in this context, refers to a procedure that focuses on employees participating in interviews and completing questionnaires to report how they feel about what needs to be done regarding a concern.

Some authors have avoided the conflicting meanings associated with the terms *needs assessment* and *needs analysis* by using different phrases. Harless (1975), for example, used the term *front-end analysis* to describe a procedure for performance problem solving. The steps of front-end analysis include narrowing the problem area, describing the problem, hypothesizing causes, testing each hypothesis, determining solution alternatives, and selecting the best alternative. Front-end analysis is similar to the conceptualizations of needs analysis and needs assessment that emphasize the identification of both the training and the nontraining causes of performance deficiencies.

One term frequently found in the training needs assessment literature is *performance analysis*. Performance analysis, however, has been conceptualized somewhat differently from needs assessment and needs analysis. According to Rummler (1981), "the purpose of performance analysis is to view organization performance as a function of the individual and the job environment; any modification of performance has to deal with both parts" (p. 27). The focus of performance analysis is on the performance system and the five components that constitute it, only one of which points to the need for training. These components are (a) the job situation; (b) the performer; (c) the response, action, or decision by the performer; (d) the consequences of the action or decision to perform; and (e) the feedback to the performer on the consequences of the behavior (Rummler, 1981). A breakdown in any one of these five components can result in poor performance. Some examples of breakdowns in the components that could result in poor performance include (a) the job situation provides ambiguous information about the need to perform, (b) the performer is not be able to perform or does not know how to perform, (c) the appropriate response is impossible because the tools needed to make the response are not available, (d) the consequences for lack of performance do not exist, or (e) the feedback that the performer receives is insufficient because it does not provide information on how to improve performance.

Although the terminology associated with determining training needs is muddy, there are some areas of agreement in the literature. Determining training needs has been described as a process of investigation, problem solving, and decision making or action research (Georgenson & Del Gaizo, 1984; Moore & Dutton, 1978; Zemke, Standke, & Jones, 1981). It has also been described as a process that precedes the implementation of a training solution (Rossett, 1987; Watson, 1979; Zemke, Standke, & Jones, 1981) and that distinguishes the performance problems that can be addressed by training from those that can best be addressed by other solutions (Laird, 1985; Nadler, 1982).

Based on an understanding of the terminology, the process of determining training needs in an organization can be thought of as performance analysis for training. This phrase provides a useful view of process because it incorporates the term *performance analysis* which conceptualizes individual performance in the organization as a function of both the individual and the job environment.

Models for Determining Training Needs

This section focuses on the theoretical models for determining performance or training needs that are described in the literature. It includes descriptions of the initial assumptions and starting points for the models, the ending points for the models, and the results that are produced.

Initial Assumptions and Starting Points

In general, the models for determining performance or training needs can be classified into two categories based on their assumptions about the starting point in the process: (a) models that assume the performance or training need has not yet been identified and (b) models that assume the performance or training need has already been identified.

Category 1: Models that assume the performance or the training need has not yet been identified. Many of the models in this category contain three phases of analysis similar to the phases first identified by McGehee and Thayer (1961). Briefly, McGehee and Thayer used an interrelated, three-phase approach for determining training needs, which consisted of organization analysis, operations analysis, and individual analysis. Organization analysis is used to determine where training can and should be used within the organization, operations analysis is used to determine the specific behavior required if the job is to be performed effectively, and individual analysis is used to examine the knowledge, skills, or attitudes that individuals must develop to perform the tasks of the job.

A number of writers have promoted a three-phase approach, including Cascio (1987), Goldstein (1986), Moore and Dutton (1978), Smith, DeLahaye, and Gates (1986), Wexley and Latham (1981), and Zemke and Kramlinger (1982).

Because the models in this category assume that the performance or training need has not yet been identified, the process focuses on identifying the need. For example, Goldstein (1986) stated that "organizational analysis begins with an examination of the short- and long-term goals of the organization, as well as of the trends that are likely to affect these goals" (p. 17). He later noted that "the problem is that these goals [of the organization] are not explicit and many times there is conflict among individuals about both the activities to be performed and the goals to be achieved" (p. 28).

Similarly, Zemke and Kramlinger (1982) noted that their preference was to start by identifying the big picture problems at the organizational analysis level. The first questions that must be answered are, Does a performance problem exist? and, If so, what are the training components? These questions are followed by three additional questions: What are the parameters of the problem, need, and task? What do we solve first? What goes into the training component?

Kaufman and Stone's (1983) Organizational Elements Model is a process for designing, developing, and implementing needs assessment and planning. This model seems to fit the first category because it does not assume that the need has already been identified. However, the Organizational Elements Model differs from the other models that have been described because its steps are not similar to the three phases of analysis used by McGehee and Thayer (1961). Instead, the Organizational Elements Model consists of the following 18 steps: (a) decide to plan; (b) select planning frame: middle, comprehensive, or holistic; (c) identify planning partners; (d) obtain planning partners' participation; (e) obtain acceptance of Organizational Elements Model framework; (f) collect needs data (internal and external); (g) place needs in priority order; (h) reconcile disagreements; (i) list problems for resolution; (j) obtain agreement of partners; (k) determine mission, functions, and detailed performance requirements and identify possible methods-means;

(l) reconcile constraints; (m) select methods-means; (n) implement methods-means; (o) determine en route effectiveness; (o) revise as (and if) required; (q) determine effectiveness and efficiency; and (r) determine revision and continuation requirements.

Category 2: Models that assume the performance or the training need has already been identified. The models in this category take for granted that the need or problem area has already been identified. For example, the first step in Watson's (1979) conceptual framework involves studying the factors external to the positions held by the persons identified for training. The identification of trainees prior to the first step indicates the presumption that there is a training need.

Another example is provided by Rossett's (1987) Training Needs Assessment model. The first step in planning the training needs assessment with this model is to assess the context. According to Rossett, assessing the context means taking some time to think about the following questions:

1. **Who wants** this problem solved or this new technology introduced? Why?
2. **Who doesn't?** Is there anyone who prefers for things to stay the same? Why?
3. Is this a solution to a **performance problem or an innovation** which is being introduced? If it is a performance problem, who might fear or attempt to block your efforts to find the cause(s) of the situation? If it is a new system, who might not want to support this change?

4. Who are the **sources** of information for this TNA (Training Needs Assessment)? Will they be accessible? Will you be able to go back to them again and again as you need additional information?

5. What **records** might provide useful information? Will you be able to go back to them again and again as you need additional information?

6. How much **support** does this entire project have? Does the TNA also have support or will you have to fight for resources to conduct it? How much time do you have?

7. **Who must be kept abreast of your findings?** Who else might want to know? Who must not know--at least at first? (p. 228)

This plan begins with a consideration of who wants the problem solved, but it does not contain steps for determining or prioritizing which problems or opportunities to address with training.

Still another example is provided by Mager and Pipe's (1984) model for analyzing performance problems. The first step in their model is to describe the performance discrepancy. The steps that follow focus on analyzing the nature, the importance, and the cause of the performance discrepancy.

In summary, the models in the second category take for granted that the performance problem or training need has been identified. Thus, the focus of these models is on solving the problem. In contrast, the models in the first category presume that the correct problem has not been identified. Thus, the initial focus of the models in the first category is on identifying the problem.

The Ending Points for the Models

The previous section focused on one parameter of determining training needs, where the process begins. This section focuses on a second parameter, where the process ends. Once again, multiple viewpoints are reported in the literature.

The process of determining training needs can end with the selection of the solution. For example, in one model, the final step in the process is to select the solution or combination of solutions that is most practical, feasible, and economical (Mager & Pipe, 1984).

A number of models go beyond identifying the solution to include reporting the results (Robinson & Robinson, 1989; Rossett, 1987; Zemke & Kramlinger, 1982). These models emphasize the importance of involving management in the process.

The process of determining training needs can also end with taking action to correct the problem. An example of this view is provided by Rummler's (1981) description of the principles of performance analysis. He described the actions that a training department would have taken if they had used the principles of performance analysis. First, the training department would have begun by questioning the extent of the problem reported by management to determine the value of solving the problem; second, they would have determined the precise cause or causes of the performance discrepancy; and, third, they would have corrected the cause of the discrepancy or recommended the necessary corrections if the causes went beyond the organizational charter or the capability of the department.

Another ending point for needs assessment described in the literature is the determination of objectives. In a number of models, needs assessment is a component of the larger framework of designing instruction. In some instances, the focus of the needs assessment is on identifying instructional needs so that training can be developed. In these models, the final step is writing the course objectives (Dodge, 1987; Goldstein,1986).

Clearly, there is no consensus in the literature about the ending point for the process of determining training needs. Instead, the ending point of the needs assessment process depends on the conceptual frame of the model being used.

The Results Produced by Using the Models

Although there is little disagreement in the literature about the importance of determining performance or training needs prior to implementing programs, much less has been written about the results to be achieved by implementing a needs assessment model and how those results should be evaluated.

One of the key outputs of the needs assessment process seems to be information. Lampe (1986) identified sixteen kinds of useful information that can be provided through the assessment process: (a) the content covered by the training and what topics should and should not be presented; (b) the gist of the training and the reasons why a student should or should not participate; (c) the various teaching points, based on formal performance objectives; (d) the activities most often associated with a given process or job; (e) the specific job responsibilities of an individual trainee at a given site; (f) the factors affecting overall organizational or system performance and issues of efficiency and effectiveness; (g) the processes and procedures that are workable, safe, legal and ethical, but not found in the book of standard operating procedures; (h) issues deemed important by the users of the product or service that the trainee helps to provide; (i) standardized ratings of potential training content areas; (j) the trainees' self-appraisals of present knowledge and skills; (k) important concepts underlying various skills and procedures; (l) trainees' preferred methods for giving and receiving information; (m) the organization's capabilities and limitations in providing the recommended training; (n) the relationship between current training and prerequisite and advanced training; (o) the estimated losses or costs to the organization if training is cancelled or delayed; and (p) nice-to-know information that can be included in the training as time permits (Lampe, 1986).

Lampe noted that the only way to get the most out of the needs assessment, that is, to get answers to questions in all 16 areas, is to get information from a variety of sources, including subject matter experts, intended trainees, managers of the trainees, former trainees, and clients/users. But Lampe also noted that there is seldom time to gather all the information desired and that by considering the kinds and the sources of information, assessment activities could be planned according to the time available and the critical concerns of the organization.

In some approaches and models, the information produced during the process of determining training needs is used in the next phase or step of a specific model for systematically designing instruction or managing human performance. For example, Hansen (1989) noted that the needs assessment system "is part of the larger intervention system that includes program development, implementation, evaluation, and revision" (p. 8). His model of needs assessment, not surprisingly, ends with the identification of solution components and parameters that can be used in developing the program.

In addition to information, another result of the process of determining performance and training needs may be the identification of training priorities that will help solve an organization's most critical business issues (Georgenson & Del Gaizo, 1984).

Still another result of the process of determining needs can be that management is drawn into the training process (Georgenson & Del Gaizo, 1984). The assumption is that if management participates in determining the needs, they will support the training that follows.

The literature contains little discussion about the quality of the products that result from the process of determining training needs. There is also little discussion about the criteria used to judge the quality of the product, who should judge the quality of the product, or what results are required for the process to be deemed a success.

Techniques for Gathering Data

The focus of this chapter has been on the analysis models that can be used to determine performance or training needs. Analysts, however, need more than a model to guide the overall process of determining performance or training needs, they must also have techniques for gathering the information.

One of the most comprehensive listings of techniques for gathering information related to training needs can be found in Moore and Dutton's (1978) literature review on training needs analysis. The review is organized using McGehee and Thayer's (1961) framework of organization analysis, operations analysis, and individual analysis, which was described earlier. For each level of analysis, the review describes analysis techniques, training need implications, and authors who acknowledge one or more of these aspects as part of the training needs analysis. (See Appendix A.) Smith, DeLahaye, and Gates (1986) updated Moore and Dutton's work by listing more current literature associated with each technique. Review of the literature provides the clear message that multiple techniques are available for gathering information to determine performance or training needs at the organizational level, at the operational level, and at the individual level.

Although the training literature describes numerous techniques for gathering information, there is much less discussion on how to use the techniques so that the results are reliable and valid. Within the area of training needs assessment, the most extensive discussion of reliability and validity can be found in McGehee and Thayer (1961). For the organization analysis phase, McGehee and Thayer identified specific issues and strategies for reliability and/or validity for individual techniques related to quantifying or using measures of efficiency. For the operations analysis phase, McGehee and Thayer identified validity and reliability issues related to literature review, performing the job, observing the job, interviews, questionnaires, and critical incident technique. For the individual analysis phase, McGehee and Thayer identified validity and reliability issues related to objective records, situational measures of knowledge and performance, observational measures, interviews, and questionnaires. While McGehee and Thayer and others talk about the validity and reliability of individual techniques for gathering data, they do not address the validity and reliability of the summative data and conclusions drawn from the multiple sources.

Goldstein (1986) also said that each of the techniques for gathering job information has unique characteristics that can affect both the quality and the kind of information that is gathered. Preventing an individual method from biasing the information that is gathered and, consequently, biasing the results requires being aware of potential pitfalls and designing the assessment so as to avoid as many difficulties as possible (Goldstein, 1986). For example, if interviews are used, the interviewer should be trained, and if a questionnaire is used, the questionnaire should be designed to achieve maximum rates of return. Bias can also be decreased when gathering data by using more than one type of interview technique, multiple interviewers, or respondents who represent a cross section of the organization (Goldstein, 1986). Even so, Goldstein offers no method for combining and validating comprehensive needs assessment data.

Indeed, there is little discussion in the literature about how to synthesize the information that is gathered from the various methods so that the results are reliable and valid. Moore and Dutton (1978) noted that the data-collection process has been downplayed, with the consequent blurring of the issues surrounding the acquisition and use of training needs analysis data. This condition is unfortunate because using techniques that produce valid and reliable information is a necessary, but not sufficient condition for producing valid needs assessment results. Obtaining accurate results requires not only that the techniques produce valid and reliable information but also that the information be synthesized and combined in a way that will produce valid and reliable results.

The Fit Between the Organizational Context
and the Models for Determining Training Needs

The process of identifying performance or training needs takes place within an organization, and it is logical that the characteristics of the organization will influence the determination of the organization's critical performance needs to be addressed with training. The process by which training needs are determined is also influenced by the characteristics of the analyst (Mitchell & Hyde, 1979) and the characteristics of the decision makers (Zemke & Kramlinger, 1982). The following sections focus on the characterizations of organizations and the influence of key personnel on the process of determining performance needs that can be addressed by training in an organization.

Characterizations of Organizations

Schall and Shapiro (1989) described organizations as persuasive communities, or networks of individuals and groups that engage in influencing one another toward their own ends. In several clarifying conversations, Shapiro emphasized that organizations can be viewed as systems (1990). He also noted that he found it useful to view organizations as cultural and political systems, which are constructed, maintained, and changed through the use of rhetoric. Schall and Shapiro described organizations as being (a) systemic, (b) cultural, (c) political, and (d) rhetorical. In the following sections, each of the four organization characterizations is described, with the implications of each characterization for determining training needs and the way the characterization is integrated into the various models for determining performance or training needs.

Organizations as systemic entities. Organizations can be thought of as systems that receive energy from the environment in the form of such things as raw materials, money, and labor. This energy is transformed into a product or service, which is then put back into the environment as an output (Burke, 1982). To reach its goals, an organization uses the resources--financial, physical, or human--that it has or can obtain (Nadler, 1982).

In the ideal business system, the performances of individuals are linked to the performance of the business unit and ultimately to the achievement of organization goals (Oberlin, 1989). Thus, each individual is responsible for a portion of the organization's process, with the combination of individual portions resulting in output for the organization.

Training can be viewed as a subsystem of the organization (Goldstein, 1986; Rummler & Brache, 1988). The mission of training has been defined as developing and maintaining the human behaviors, or performances, required by an organization to meet its goals (Warren, 1979). In most organizations, training serves as a support function that facilitates the work of the individuals who perform the organization's main tasks (Laird, 1985). Training acts as a conduit between the organization's strategy and goals and the individuals who perform the essential work needed to accomplish the strategy and goals. Training provides individuals with the knowledge, skills, and attitudes they need to perform the essential work of the organization. To be successful, training efforts must meet the needs of both the organization and those who need training.

Training is only one of several potential solutions that an analyst can recommend to the organization for solving its human performance problems. Other potential solutions for achieving human performance goals are job performance aids, feedback systems, employee selection, and organization redesign (Jacobs,1989).

The relationship between the factors that affect human performance has been noted by many authors as has the relationship between an organization's human resources and its financial and physical resources (Gilbert, 1978; Jacobs, 1989; Nadler, 1982). The problems that stand in the way of an organization reaching its goals often have multiple causes and solutions. For example, workers who cannot perform their jobs because they lack both the work tools and the skills to use the tools will not improve their performance simply because they receive skills training in tool use--they must also obtain access to the tools they need. Similarly, when the organization offers insufficient rewards for performance, training will bu unlikely to solve the performance problem. Successful training results from understanding the relationship between the training and the nontraining components of performance and from identifying organizational problems that can be resolved through improvements in specific employee knowledge, skills, and attitudes.

Rummler and Brache (1988) have compared two views of the training function, the systems view and the vacuum view. In the systems view, the training function is assumed to be part of the organization's system and training is conducted to improve organizational performance. In the vacuum view, training is assumed to provide knowledge and skills to individuals who operate in a performance vacuum that is isolated from and immune to the rest of the organization. In the vacuum view, training's role is to respond to requests for training by "whipping up a program." In the systems view, training's role is to respond to requests for training by asking questions about how the request relates to the organization's performance and by determining performance improvement initiatives that include such things as feedback, incentives, and job design. Rummler and Brache noted that "an organization's view of performance--whether it adheres to the vacuum view or the systems view--will determine the mission of its training function, how it goes about identifying training needs, the operating components of the training function (its units and processes) and how much impact the function will have on the organization's performance" (p. 53).

Some models for determining training needs stress the importance of understanding the organization as a system (Vinton, Clark & Seybolt, 1983; Warren, 1979). These models tend to emphasize that training is a subsystem in a larger organizational system, that training must be aligned with the mission of the organization, and that most training actions will involve interaction between the individual and the components or subsystems of the organization.

In summary, thinking of organizations as systems can provide the training professional with insight into the interrelationships between training and other organization subsystems.

Organizations as cultural entities. Organizations can be thought of as cultural entities. Schein (1984) defined culture as

> the pattern of basic assumptions that a given group has invented, discovered, or developed in learning to cope with its problems of external adaptation and internal integration, and that have worked well enough to be considered valid, and, therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems. (p. 4)

Culture that is based on the shared assumptions of group members influences the expectations and the understandings of the group members. The elements of a culture include shared values, heroes and heroines, rituals, ceremonies, stories, and a cultural network that communicates and protects the culture (Deal, 1986).

Workplace cultures are manifested in the experiences of group members (Louis, 1985). This manifestation occurs because group members negotiate their daily lives; they notice and respond to some things in the environment but not to others, and they negotiate or bargain when there is conflict or doubt.

Culture is specific to a given group. An organization that comprises multiple subgroups can have multiple subcultures. The kinds of subgroups that can be found in organizations include functional groups, divisional groups, and geographical groups. The subcultures of the subgroups can differ. For example, the culture of the organization's management group could be very different from the culture of the production group. Schein (1984) pointed out that the various subgroups within an organization can be in conflict with each other such that one could not describe a single corporate culture. He also noted that if there has been a common corporate experience, then a strong corporate culture would form on top of the subcultures.

Manifestations of a culture can be found in the symbols and settings of the workplace (Deal & Kennedy, 1982; Louis, 1985). For example, the physical settings of the workplace such as the office arrangements, the type of furniture, and the wall decorations can reveal the culture. The legends, stories, and myths of the workplace can also reveal the culture.

A relationship exists between the culture of the organization and training because training either supports or challenges the culture (Glidewell, 1986). If the culture that is espoused and supported in the training room is incongruent with culture on the job, either the trainees must reject the new learning or their behavior on the job must be changed (Deal, 1986). Moreover, the acceptable ways of explaining reality, the traditional ways of doing things, and the history of the organization can all affect the way in which training needs are determined, whether training is selected as a solution, the kind of training that is selected, and the ultimate effectiveness of the program.

Some models for determining performance or training needs stress the importance of the organization's climate, a term that is closely related to culture. Both the organization's climate for training and the climate of the work environment have been identified as being important (Goldstein, 1986; McGehee & Thayer, 1961; Vinton, Clark, & Seybolt, 1983). Hansen (1989) and Goldstein (1986) noted that when an organization climate is marked by conflicting goals and objectives, problems can arise later in the training--eventually undermining the training program.

Problems can also arise when the values of the work place differ from the values promoted in the training program (Goldstein, 1986). When values differ, training is more likely to result in confused workers than in the transfer of knowledge, skills, or attitudes from the training program to the work environment.

In summary, thinking of organizations as cultural entities can provide the analyst with insight into the assumptions that individuals and groups have about the organization. In addition, by examining both the organization culture and the culture of the training function, the analyst can gain insight into the amount and kind of support available to training for changing or supporting the organization's culture, as well as insight into whether the training will support or challenge the organization culture.

Organizations as political entities. Organizations can be thought of as political entities. Bacharach and Lawler (1980) described organizations as politically negotiated orders where the organization's actors use power or influence to achieve their own ends. Politics stems from the diversity of opinions that are held by individuals within the organization. Political activities occur when people have differing views and want to act differently. Organizations are intrinsically political because ways must be found to create order and direction among people with potentially diverse and conflicting interests (Morgan, 1986). According to Morgan people in an organization must cooperate to achieve a common task; at the same time, they must compete for limited resources, status, and career advancement. Political activities have been described as corrupting and unpleasant, but, in actuality, they may be either positive or negative, depending on whether they help or hinder the organizational processes and effectiveness (Margulies & Raia, 1984). Political activities can be directed toward either changing the status quo or supporting it.

Trainers encounter the organization's political reality whenever they try to garner the support needed to operate the training function effectively. Trainers in this situation face a dilemma: Those who involve themselves with traditional training activities may be perceived as ineffective and passive, whereas those who engage in acquiring and using the influence skills necessary to empower the training function may be perceived as being involved in political behavior (King, 1989).

Trainers also engage in political behavior because of their role in the organization. As was noted earlier, the content of training either supports the culture of the organization or challenges it (Glidewell, 1986). Beyond this, some decisions in an organization have been termed hot issues because they are more likely to be perceived as politically motivated. These issues typically include promotions, transfers, firings, budgeting, territorial disputes, and questions of authority (Terrell, 1989). These are the very same issues that affect human performance and that are often addressed with training solutions. In addressing such issues, trainers become involved in politics. To the extent that issues in the environment are political, the training department, whenever it identifies and addresses the training component of those issues, is involved in politics. In this same view, training needs assessment as a political process can have implications for the organization's power structure and for those who control the real and symbolic resources within the organization.

Trainers become involved in the politics of the organization both through the process of gaining the necessary support for carrying out the work of training and through the process of addressing issues that are important to the organization.

Some models for determining training needs include consideration of organization politics (Harless, 1975; Rossett, 1987; Zemke & Kramlinger, 1982). Rossett pointed out that training needs assessments are conducted in the real world, and, therefore, they must be conducted in light of real-world constraints, which include the politics surrounding the situation. Her model assumes that decision making involves a balance between the search for information and the recognition of the economic and political situation. Zemke and Kramlinger stated a similar idea:

> We've all run into situations wherein management opinion, government edict, or organizational politics has mandated that training is the answer, never mind the question. Our advice is to test the waters gently; if important minds have already been made up and funds allocated, don't fight city hall. . . . Most of the time, though, opinions are split over the cause or causes of the performance problem you're being asked to help solve, and solutions are far from obvious to anyone. Often, key groups such as the performers themselves (especially the low performers), won't even agree that there is a performance problem. (p. 218)

In summary, thinking of organizations as political entities provides the analyst with insight about the necessity of gaining support for training. It also provides the analyst with an understanding of the complexities that can be associated with organizational performance issues. Determining performance or training needs in a political organization may be far different from a process of rationally identifying *the* correct, objective performance problem.

Organizations as rhetorical entities. Organizations can be thought of as rhetorical entities. Rhetoric is communication by which individuals try to change the conditions that they perceive exist around them (Conrad, 1985). Rhetorical communication differs from communication that is designed to present information or to express beliefs or feelings (Conrad, 1985).

> In essence, communication in organizations is rhetorical communication. It is communication which has an *instrumental* purpose, which involves a variety of goals in addition to the sheer need to express emotions or provide information. It may involve objectives as personal as creating a desired image of oneself in the minds of others or as broad as improving the firm's market share. (Conrad, 1985, p. 172)

Pacanowsky and O'Donnell-Trujillo (1983) also noted that within an organization many of the communications and interactions by which the members construct reality are aimed at influencing others. These communications and interactions include all the ways organizational members display their strength and ability to get things done, and the ways they recruit allies and establish relations with loyal others (Pacanowsky & O'Donnell-Trujillo, 1983).

In rhetorical organizations, where individuals and groups use persuasion and influence to get things done, the required skills include understanding how things are done within the organization and how to use communication to influence others in cooperating to reach goals. Achieving organization goals is a function of knowing both what should be done and how to get it done through people. By implication it may be as important for training professionals to train individuals in the skills needed for working with others in the organization as it is to train them in subject matter content.

Also by implication, organization members may decide to use training as a rhetorical communication tool. Individuals or groups may use training to influence others in the service of their own preferred outcomes. For example, in orientation training new hires are presented with management's view of the organization and are persuaded to adopt this view.

Beyond that, training professionals who want to contribute successfully to organizational performance in a rhetorical organization must themselves use rhetoric to influence others in accomplishing the tasks that have been assigned to the training function.

Although the term *rhetoric* is seldom found in the needs assessment literature, some authors subscribe to using language as a persuasive tool. For example, Zemke and Kramlinger (1982) noted that the goal of reporting the findings of the assessment should be to cause someone to do something and that the report should be audience sensitive. They also noted that the report should take into consideration such things as the audience's educational level, vocabulary, background, and experience, and the media style appropriate for the audience. Zemke and Kramlinger stated that "the trick is to tailor. If you plan to present your findings to six people, find out as much as you can about the communication styles and organizational and personal needs of those individuals" (p. 249).

Nadler (1982) pointed out that words must be found that communicate effectively and have the same meaning for all the individuals concerned. According to Nadler, "most work situations have their own language, or jargon, and it is important that these be clarified on the listings of the needs" (p. 98). Nadler also observed that for those who share the same cultural experiences, words usually have similar meanings, but that misunderstandings can occur even within cultural groups.

In summary, understanding organizations as rhetorical entities provides the analyst with insight into the important role that rhetorical communication plays in the process of determining training needs. That is, persuasive language is the medium through which information is gathered, as well as the medium through which the findings are reported to organization members. Consequently, language influences the process of determining training needs.

Summary of organization characterizations. Organizations are described in the literature as systemic, cultural, political, and rhetorical entities. As training professionals understand organizations, so they will go about the process of identifying performance or training needs. Many of the models for determining training or performance needs that were reviewed addressed one, two, or three of these characterizations, but no model addressed all four.

The Influence of Key Personnel

The literature also described the key personnel who influence the process of determining training needs: the decision makers and the analyst (Sleezer & Swanson, 1989).

Decision maker characteristics. Decision makers influence the process of determining performance or training needs because of their roles in the organization and in the process. For example, Vinton, Clark and Seybolt (1983) observed that top management creates many of the constraints that prevent the knowledge, skills, and attitudes learned in training from transferring to the job. They characterized top management's involvement in the needs assessment process as essential.

Additional characteristics that could influence the determination of training needs include such things as biases about how information is presented (Zemke & Kramlinger, 1982), the decision makers' expectations (Goldstein, 1986), and the amount of consensus among decision makers (Goldstein, 1986).

In the process of determining performance or training needs, the training manager may serve in either the analyst or the decision maker role. The training manager assumes the role of analyst by working to determine the needs. The training manager assumes the role of decision maker by engaging external consultants to carry out the work of determining the needs. In this situation, the training manager becomes a decision maker who determines whether the consultant's process and product are appropriate for the organization. In either situation, the training manager's power affects both the process and the product of the analysis.

But training managers have a power problem (Calabria, 1980). Although training managers need power to do their work, the way that the work is structured can result in their having little influence in the organization. For example, training managers are dependent on others for the resources, materials, and supplies they need to do their work. Calabria noted that training professionals can avoid the vulnerability that results from taking a dependent role by gaining and using power. She suggested that training professionals consolidate their power by providing training that is designed to solve the organization's most pressing problems, shifting the location of their contribution in any decision chain from the later stages to the earlier stages, auditing the level of skills in other departments, forming helpful political alliances, and pursuing research and innovative tasks that are difficult for the outsider to evaluate.

Calabria (1980) pointed out that avoiding organizational politics is ruinous. Going through the channels of formal authority and presenting the case may not always work. She stated that "If training managers do not have powerful sponsors, peers or subordinates to call on, they will be stuck. And stuck is what training managers often become" (p. 55). Whether they have the role of analyst or decision maker, training managers need power to acquire the organizational resources and the support necessary for determining training needs in their organizations.

Analyst characteristics. The analyst who manages the process of determining the training needs in an organization can also influence both the process used to determine training needs and the product of that analysis. As Hiebert & Smallwood (1987) pointed out, the analyst can influence how the situation is defined and the realities that are created. This is done by choosing to include certain information, ignoring or deflecting other pieces, ordering the information, and choosing a model of how the information is organized.

Key analyst characteristics include the individual's biases (Goldstein, 1986), skill level, style, and experience (Stone, 1986). The amount and type of power that the consultant has is also an important characteristic, especially in those situations where training is being used to change the organization's culture. Margulies and Raia (1984) pointed out that Pettigrew (cited in

Margulies & Raia, 1984) and Beer (cited in Margulies & Raia, 1984) had identified sources of power pertinent to the role of consultants engaged in organizational change efforts. These sources of power are competence and expertise, control of information, political access and sensitivity, sponsorship, assessed stature and credibility, resource management, and group support.

The analyst's position as an internal or external consultant is also an important characteristic. Analysts who are internal to the organization are more likely to have access to situations, individuals, and resources. They are also likely to be faced with constraints because of internal organizational politics and because of their positions in the hierarchy.

In contrast, analysts who are external to the organization are more likely to be able to identify the organization's culture because they are not caught up in it. In addition, external consultants may have had relevant experience in other organizations, may be more credible with the decision makers, and may be more willing to take risks because they are dealing with a client rather than a job. However, the external analyst may not fully understand the economics of the business and the marketplace in which the business is involved. Those who are external to the organization may also need assistance in gaining access to the culture and in interpreting cultural events (Berger, 1986).

Summary

The literature leads to the conclusion that determining performance or training needs is not a static process of searching for the *right* answer, but a dynamic, negotiated process. The process used to identify the performance or training needs, the solutions that are identified, and the final product are all influenced by the systemic, cultural, political, and rhetorical characteristics of the organization; by the decision makers who operate within the organization; and by the analyst who manages the process of determining the performance or training needs of the organization.

Figure 1 shows the elements that affect decisions about organization performance needs for training. In this figure, organization characteristics are the distinguishing traits, features, and qualities of an organization that affect the definition and the determination of training opportunities/needs. Decision makers' characteristics include the distinguishing traits, features, and qualities of those who make determinations or judgments about training programs. Analyst characteristics are the distinguishing traits, features, and qualities of the individual who manages the process and project.

The area where the circles overlap is the area of commonality among the decision makers, the analyst, and the organization. It is through the interaction of the three elements in this area that training opportunities/needs are perceived, negotiated, and prioritized.

The process of investigation, decision making, or action research associated with determining training needs is complex and dynamic, and mistakes made in the process can be costly. Consequently, a model that can guide the process is needed. Based on the review of the literature, it is responsible to conceptualize the process of determining training needs as one of performance analysis for training rather than training needs analysis or assessment. This conceptualization incorporates the idea that organization performance is a function of both the individual and the job environment.

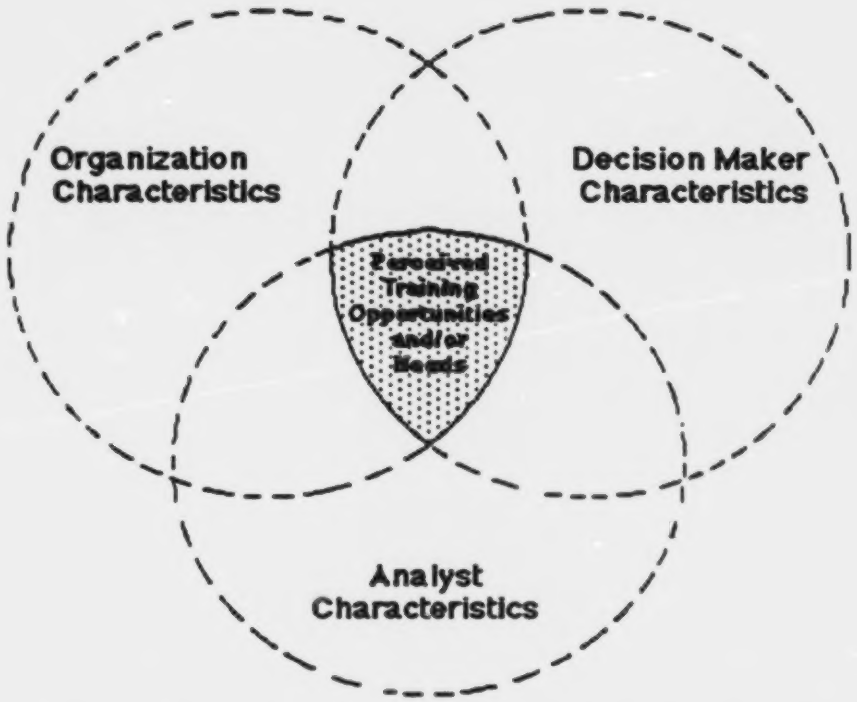
Organization Characteristics
Decision Maker Characteristics
Perceived Training Opportunities and/or Needs
Analyst Characteristics

Figure 1. Elements that affect decisions about training needs.

A model for guiding performance analysis for training in business and industry should recognize the influence of organization characteristics on the process. Specifically, the model should take into account that organizations are cultural, political, and rhetorical systems. The model should also consider the characteristics of decision makers and the analyst that affect the perception, negotiation, and determination of training opportunities or needs.

CHAPTER 3

DEVELOPMENT OF THE PERFORMANCE ANALYSIS FOR TRAINING MODEL: METHOD AND RESULTS

The first research question for this study was, Can a Performance Analysis for Training (PAT) model be developed to guide the practice of analyzing training needs in a dynamic organization? This chapter focuses on the method used to answer the first research question and the results that were obtained.

Method Used to Develop the PAT Model

Prior to choosing the method used to develop the PAT Model, the investigator determined that the appropriate method would meet three criteria:

1. The method had to be appropriate for analyzing knowledge work.
2. The method had to be suitable for analyzing and synthesizing information from the literature and from practitioners.
3. The method had to describe a needs assessment process by which experts could further validate the PAT Model.

The first criterion, that the method be appropriate for analyzing knowledge work, was established because developing the PAT Model would require an accurate understanding of the process by which an analyst determines training needs. Much of this process involves higher cognitive thinking, which is unobservable. For example, a number of decisions are made during the process of determining training needs. Observable behavior during decision making is insufficient for understanding the procedural details or the correct mental contortions for this task (Swanson, 1981).

The second criterion, that the method be suitable for analyzing and synthesizing information from the literature and the practitioner, was established to address the theory-to-practice problem in training needs assessments.

The third criterion, that the method describe a needs assessment process by which experts could further validate the PAT Model, was a quality control check prior to field testing the model.

Subject Matter Analysis

Based on the three criteria listed above, the investigator determined that a modified form of subject matter analysis would be an appropriate method for developing the PAT Model. Subject matter analysis is a method for analyzing complex, non-observable work behavior (Swanson & Gradous, 1986). The method involves analyzing the theory, the principles, and the practices necessary to perform abstract work tasks (Swanson, 1982). Subject matter analysis is outlined in Figure 2. The five major steps of subject matter analysis, as described by Swanson (1981, 1982) and Swanson and Gradous (1986), involve specific substeps. The following sections contain a description of actions taken during the five major steps of the subject matter analysis. The investigator modified the method by adding a 6th step for validation purposes: review by experts. Actions taken during this step are also described.

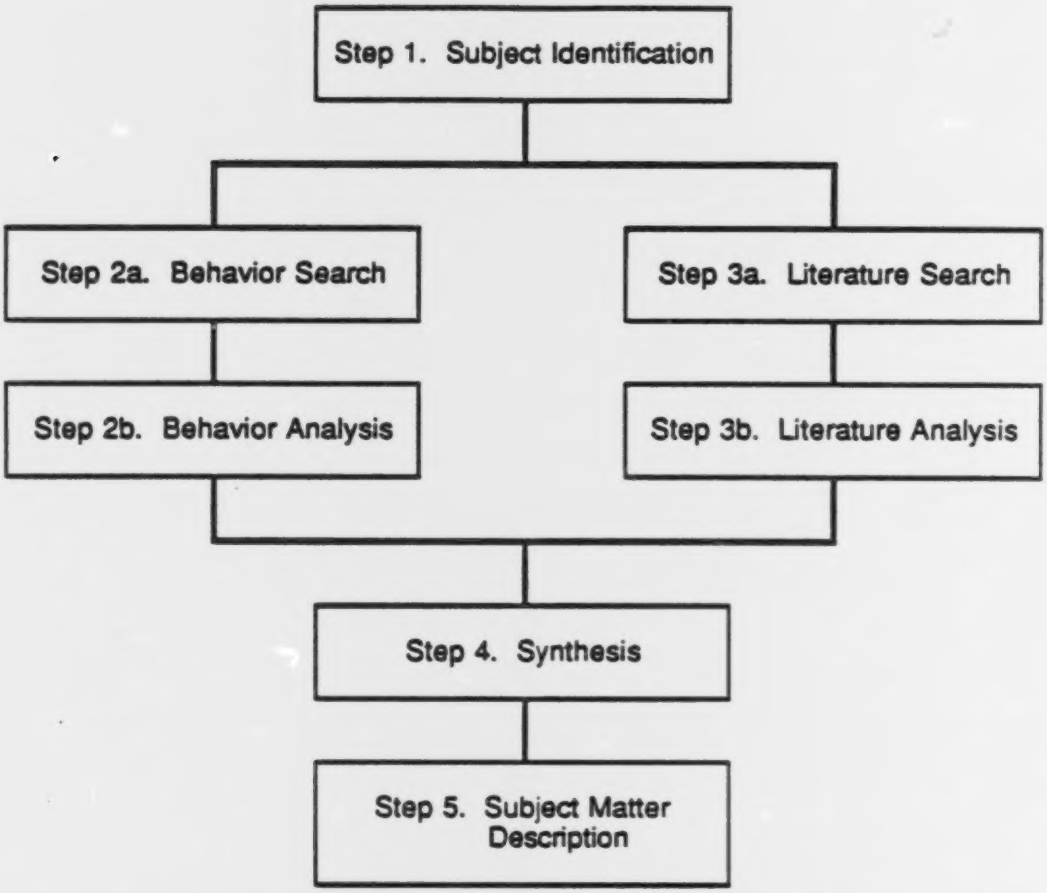
Step 1. Subject Identification
Step 2a. Behavior Search
Step 3a. Literature Search
Step 2b. Behavior Analysis
Step 3b. Literature Analysis
Step 4. Synthesis
Step 5. Subject Matter Description

Figure 2. Subject matter analysis. (Note. From Performance at Work [p. 172] by R. A. Swanson & D. Gradous, 1986, New York: Wiley.)

Step 1. Subject identification. The first step in subject matter analysis involves identifying the subject or area of work to be investigated. After the subject has been identified, the investigator then can begin to focus on specific content relative to the subject (Swanson, 1982). After the first step, the investigation branches into two paths. One path focuses on behavioral analysis of the subject, and the other path focuses on literature analysis.

Step 2. Collection and analysis of behavioral information. The second step in subject matter analysis involves collecting and analyzing information about behavior in the workplace. In Step 2a, information is gathered to identify the knowledge, skills, and attitudes needed for job success. Information about the subject is collected and analyzed. Appropriate methods for collecting this information include interviews, questionnaires, on-site observations, and operations or worker performance records (Swanson, 1981). In Step 2b, the behavioral information that has been collected is analyzed to determine if it is complete and relevant.

Step 3. Collection and analysis of literature. The third step in subject matter analysis involves in-depth search and review of printed material on the subject to learn what other theorists and expert practitioners have thought about or done in similar performance situations (Swanson & Gradous, 1986). In Step 3a, literature from the theorists, researchers, and experts on the subject is gathered. In Step 3b, the information that has been collected from the literature is analyzed to determine if it is complete and relevant.

Step 4. Synthesis. The fourth step in subject matter analysis involves organizing, combining, and conceptualizing the collected information into a simplified knowledge or performance model that shows the relationship among the facts that have been collected. Swanson and Gradous (1986) have identified eight synthesis techniques that can be used to synthesize knowledge and experience: (a) two-axis matrix, (b) three-axis matrix, (c) flowchart, (d) events network, (e) dichotomy, (f) argumentation, (g) graphic modeling, and (h) reflection.

Step 5. Subject matter description. The fifth step in subject matter analysis involves describing the important information about the subject in a well-organized fashion. According to Swanson and Gradous (1986), the subject matter description may or may not include the synthesis model.

Step 6. Review by experts. The sixth step, which is a modification to the subject matter analysis method, involves expert review of the model. Individuals with expertise in the theory and the practice of the subject review the process and subject matter description and evaluate its face and content validity. This step also includes revision of the subject matter description to incorporate the relevant suggestions of the experts.

Results

This section details how the method was implemented for this study and the results that were obtained for each of the six steps. Figure 3 shows an overview of the modified subject matter analysis that was used to develop the PAT Model and activities taken at each step.

Step 1. Subject Identification

In the first step, the investigator identified performance analysis for training as the subject of the investigation. This decision was based upon the problem statement and purpose of the study as described in chapter 1.

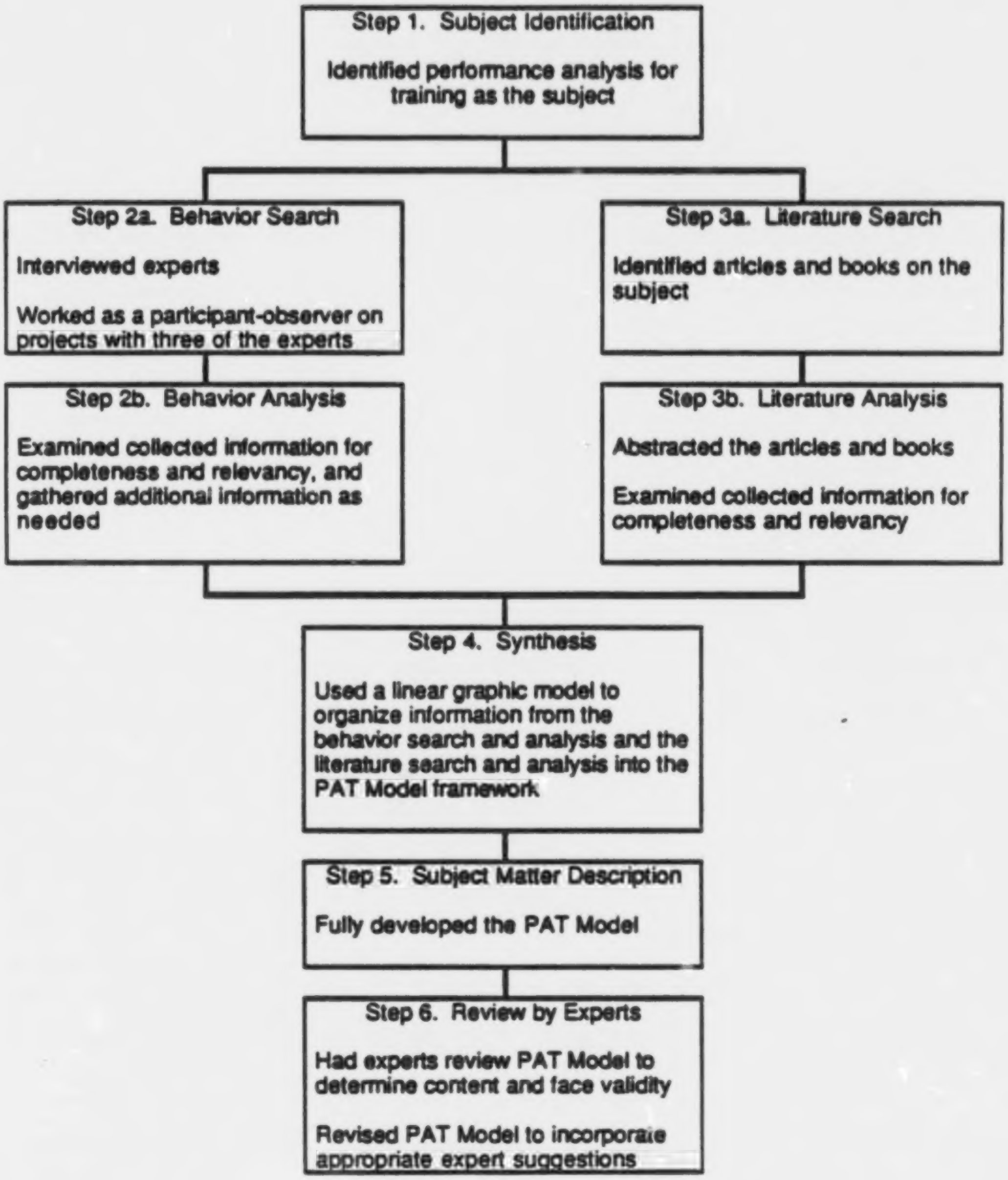
Step 1. Subject Identification
Identified performance analysis for training as the subject
Step 2a. Behavior Search
Interviewed experts
Worked as a participant-observer on projects with three of the experts
Step 3a. Literature Search
Identified articles and books on the subject
Step 2b. Behavior Analysis
Examined collected information for completeness and relevancy, and gathered additional information as needed
Step 3b. Literature Analysis
Abstracted the articles and books
Examined collected information for completeness and relevancy
Step 4. Synthesis
Used a linear graphic model to organize information from the behavior search and analysis and the literature search and analysis into the PAT Model framework
Step 5. Subject Matter Description
Fully developed the PAT Model
Step 6. Review by Experts
Had experts review PAT Model to determine content and face validity
Revised PAT Model to incorporate appropriate expert suggestions

Figure 3. Overview of the modified subiect matter analysis method used to develop the PAT Model.

Step 2. Collection and Analysis of Behavior

In the second step, the investigator collected and analyzed information about behavior in the workplace. In Step 2a, the investigator interviewed experts who had worked in and with organizations. The experts and their areas of expertise were as follows: Dr. Richard A. Swanson and Dr. Gary N. McLean, practitioners and researchers in training and organization development; Dr. George L. Shapiro, practitioner and researcher in rhetoric, organization behavior, and ethical behavior in organizations; Dr. David C. Bjorkquist, practitioner and researcher in needs assessments; and Dr. Luther P. Gerlach, practitioner and researcher in culture.

In addition to talking with these experts and taking graduate-level classes from them, the investigator worked as a practitioner-observer on projects to address problems in business and industry with three of the experts. These projects included working with Dr. Bjorkquist in guiding students of needs analysis in determining an organization's training needs, with Dr. Gerlach in analyzing cultures of groups who had a vested interest in water management, and with Dr. Swanson in using a corporate culture survey to monitor the results of changes in an organization's behavior and to point out needed change. The investigator recorded notes when talking and working with the experts.

In Step 2b, the collected behavioral information was analyzed to determine if it was complete and relevant. During this analysis, the investigator determined that the information was not complete and gathered additional information from the experts. The investigator talked with Dr. Gerlach about culture and resource management in an organization and with Dr. Swanson about the initial steps in the needs assessment process.

Step 3. Collection and Analysis of Literature

The third step of the subject matter analysis involved gathering and analyzing information from the literature. In Step 3a, the investigator reviewed the literature relative to implementing needs assessments. In Step 3b, the books and articles were abstracted in reference notes. The reference notes were printed out and analyzed to determine if they were complete and relevant.

In reviewing the reference notes about implementing a needs assessment, the investigator found information about the role and characteristics of the analyst, the role and characteristics of the decision makers, and the characterizations of organizations as systemic, cultural, and political. The processes for determining training needs that were described in the literature relied on communication as the means for gathering information but did not use the term rhetoric. In addition, none of the references articulated these elements into one model or described a needs assessment process that took all the elements into account.

In reviewing the reference notes, the investigator also realized that some pieces of literature had discussed the topic of training needs assessment but had not articulated specific steps related to the implementation of the needs assessment. These pieces of information were determined to be irrelevant for this subject matter analysis and were deleted.

The reference notes used in developing the PAT Model are contained in Appendix B. The reference notes that were used tended to articulate specific actions related to the determination of training needs and presented a viewpoint consistent with the other information that had been gathered.

Step 4. Synthesis

After reviewing the information from the behavioral and literature paths, the investigator used the graphic model synthesis tool to present a linear model of the phases and steps to use in conducting a performance analysis for training. The three phases of the Performance Analysis for Training Model and steps for each phase are as follows:

Phase 1: Organization analysis. Determine where in the organization or work group the training emphasis should be placed. Steps taken during this phase are as follows:

- Identify perceived opportunities.
- Determine the purpose and the parameters of the analysis.
- Gather information about potential training opportunities/needs.
- Gather anecdotal information.
- Analyze information.
- Report the findings to decision makers.
- Decision makers acknowledge, prioritize, and determine the training opportunities/needs.

Phase 2: Work behavior analysis. Identify and document the specific behaviors needed to accomplish the work. Steps taken during this phase are as follows:

- Identify the work to be analyzed.
- Construct a work behavior analysis plan.
- Conduct the work behavior analysis.
- Gather anecdotal information.

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Phase 3: Analysis of individual capabilities. Determine which employees need training and the kind of training they need. Steps taken during this phase are as follows:

- Identify characteristics and capabilities of the group of trainees.
- Gather anecdotal information.
- Synthesize and analyze information.
- Report findings to the decision makers.
- Communicate findings and anecdotes to those who will design the training.

Step 5. Subject Matter Description

The fifth step of the subject matter analysis involved formulating a well-organized description of the important information about the process of performance analysis for training. This subject matter description was the first full draft of the PAT Model. The first draft of the PAT Model is contained in Appendix C.

The first draft of the PAT Model detailed a three-phase process for identifying and prioritizing the contributions that training should make to the performance goals of an organization. The model presumed that the person who managed the process of determining training needs, the analyst, was not the decision maker. The model's initial assumption, or starting point, was that the organization performance or training needs had not yet been identified. The model's ending point, or last step, was the communication of findings and anecdotes to the decision makers and to those who needed to know.

Implementing the PAT Model was expected to result in specific outcomes related to the determination of training needs. These outcomes included (a) drawing the organization's decision makers into the training process, (b) providing the organization's decision makers with accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of the organization, and (c) providing information useful for the design, development, implementation, and evaluation of training. In addition, implementing the PAT Model was expected to result in a process of determining training needs that took into account the interaction of the organization's, the analyst's, and the decision makers' characteristics.

The first draft of the PAT Model included a graphic of the three conceptual elements that affect decisions about training needs, a list of the phases and steps involved in the process of determining training needs, and a set of worksheets that detail the phases, steps, and activities involved in determining training needs in an organization.

Step 6. Review by Experts

The sixth step engaged three experts in the field of training needs assessment in a detailed review of the PAT Model to determine whether or not the model was valid. Specifically, the experts determined the content and face validity of the PAT Model. The experts who reviewed the model were: Dr. Gary Geroy, Dr. David Bjorkquist, and Mr. Paul Habegger. Both Geroy and Bjorkquist have written articles on training needs assessment and instructed on the topic of training needs assessment at the graduate level. Habegger is the vice president of Business Dynamics, Inc., an organization that specializes in needs assessments in business and industry.

Each expert received a packet that contained a cover letter describing the purpose of the review, the first draft of the PAT Model, PAT worksheets with the names of some of the authors who had written about specific steps, and the questions to be completed after the model was reviewed. The information given to the experts in addition to the first draft of the PAT Model is contained in Appendix D. Also, following the review of the PAT Model, the investigator met with each expert and discussed the model and the research project. The investigator recorded each expert's comments and suggestions about the model.

Each of the experts indicated that the model reflected the literature and current practice, that the model was complete, and that there was harmony between the components of the model. Each of the experts offered detailed comments about the model and suggestions for improving it. In general, the comments focused on expanding and explaining specific steps or actions of the PAT Model, or noting the particular importance of a step or action. Most of the suggestions focused on articulating more clearly the relationship between the components of the model, expanding the explanations, or adding additional steps to the worksheet.

Two of the experts disagreed about the potential action in Phase 1, Step 3, of renegotiating the purpose and parameters of the needs assessment. Habegger noted that renegotiating should not be necessary at this point in the process, and Bjorkquist commented that it could be appropriate at this time to renegotiate. The investigator chose to include the renegotiation action in Phase 1, Step 3 of the PAT Model because it was an optional action. The specific suggestions and comments of each expert are listed in Appendix E.

The first draft of the PAT Model was revised to incorporate the experts' suggestions and the result was the PAT Model. Incorporating the experts' suggestions did not change the starting point of the PAT Model (that the organization performance or training needs had not yet been identified), or the results that were expected to be achieved by implementing the model.

However, incorporating the experts' suggestions changed the ending point of the model. The first draft of the PAT Model ended with the step "communication of findings and anecdotes to the decision makers and to those who needed to know." After revision, the PAT Model ended with the step "communicate the findings and anecdotes to those who will design the training."

The PAT Model, which included a graphic of the three conceptual elements that affect decisions about training needs, a list of the phases and steps involved in the process of determining training needs, and a set of worksheets that detailed the phases, steps, and activities involved in determining training needs in an organization, is shown on the following pages. The graphic that provides background information about the PAT Model and shows the three conceptual elements of the model is contained in Figure 4; the list of PAT phases and steps is contained in Figure 5; and the PAT worksheets are contained in Figures 6-21.

Performance Analysis for Training Model

The focus of the Performance Analysis for Training (PAT) model is on identifying the organization's performance needs that should be addressed with training. The model includes a graphic of the three elements that affect decisions about training needs, a list of the phases and steps involved in the process of determining training needs, and the set of worksheets that detail the phases, steps, and activities involved in determining training needs in an organization.

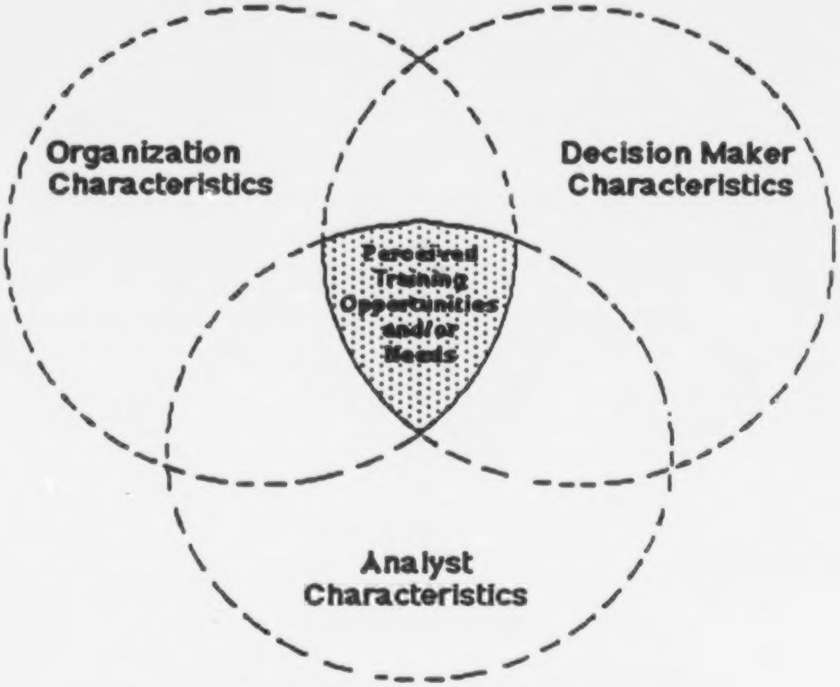
The investigator gained information from (a) interviewing experts in organization behavior and in training needs assessments; (b) reviewing the training needs assessment literature; and (c) reviewing the literature on organizations as political, systemic, cultural, and rhetorical entities. As a result, three elements that affect training needs were identified: organization characteristics, decision maker characteristics, and analyst characteristics. The graphic that depicts the elements is shown on the following page.

Organization characteristics are the distinguishing traits, features, and qualities of an organization that affect the definition and the determination of training opportunities/needs. The literature characterizes organizations as being systemic, cultural, political, and rhetorical entities. The specific traits, features, and qualities evident in this characterization of organizations include the internal and external environment (Watson,1979) and other system-wide components of an organization that may affect the training program (Goldstein, 1986); the organization's climate or culture (Goldstein, 1986; Hansen, 1989), the politics surrounding the situations, and the language used in the organization to influence behavior (Schall & Shapiro, 1989).

Decision maker characteristics include the distinguishing traits, features, and qualities of those who make determinations or judgments about training programs. Some of the characteristics identified in the literature include the expectations that decision makers have about training programs (Goldstein, 1986; Kaufman & Stone, 1983), the amount of consensus among decision makers (Goldstein, 1986), and the amount of support that the decision makers have for training.

Analyst characteristics are the distinguishing traits, features, and qualities of the individual who manages the needs assessment process and project. Some characteristics identified in the literature include the ability of the analyst and his or her biases toward behavior or cognitive models (Goldstein, 1986; Zemke, 1982).

Figure 4. Conceptual elements that affect training decisions.


Organization Characteristics
Decision Maker Characteristics
Perceived Training Opportunities and/or Needs
Analyst Characteristics

Elements That Affect Decisions About Training Needs

The shaded area where the circles overlap is the area of commonality among the decision makers, the analyst, and the organization. The extent to which the circles overlap can vary from situation to situation. It is through the interaction of the three elements in the shaded area that training opportunities/needs are perceived, negotiated, and prioritized.

The PAT Model consists of three phases. The first phase focuses on analysis of organizational opportunities/needs for training, the second phase focuses on work behavior analysis to identify the specific behaviors needed to accomplish the work; and the third phase focuses on analysis of individual capabilities to determine which employees need training and the kind of training they need.

Figure 4. Conceptual elements that affect training decisions (continued).

Phases and Steps of the Performance Analysis for Training (PAT) Model

Phase 1. Organization Analysis

Determine where in the organization or work group the training emphasis should be placed.

The steps in this phase are as follows:

1. Identify perceived opportunities.
2. Determine the purpose and the parameters of the analysis.
3. Gather information about potential training opportunities/needs.
4. Gather anecdotal information.
5. Analyze information.
6. Report the findings to decision makers.
7. Decision makers acknowledge, prioritize, and determine the training opportunities/needs.

Phase 2. Work Behavior Analysis

Identify and document the specific behaviors needed to accomplish the work.

The steps in this phase are as follows:

1. Identify the work to be analyzed.
2. Construct a work behavior analysis plan.
3. Conduct the work behavior analysis.
4. Gather anecdotal information.

Phase 3. Analysis of Individual Capabilities

Determine which employees need training and the kind of training they need.

The steps in this phase are as follows:

1. Identify characteristics and capabilities of the group of trainees
2. Gather anecdotal information.
3. Gather information about nontraining causes of performance.
4. Synthesize and analyze information.
5. Report findings to the decision makers.
6. Communicate findings and anecdotes to those who will design the training.

Figure 5. List of the phases and steps of the PAT Model.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1. Organization Analysis

Determine where in the organization or work group the training emphasis should be placed.

Step 1. Identify perceived opportunities.

This step occurs during the initial interviews between the analyst and the client. It is part of the discovery or sales process between the analyst and the client. Note that the information gathered in this step can be misleading because people at different places in the organization can have different perceptions of the opportunities/needs.

- Identify the perceived opportunities and the individual(s) who view them as important.

Perceived Opportunities	Perceived by

- What is the product of the organization or work group? ____________________
____
- Who is the client? ____________________
____
- Analyze the information that has been gathered up to this point. ____________________
____
- Which of the perceived opportunities are related to the organization's bottom line? ______
____
____
- Analyze the information that has been gathered up to this point. ____________________
____
- How are the perceived opportunities related to the bottom line? ____________________
____
____
- Do the perceived opportunities seem to have a knowledge, skill, or attitude component that can be addressed with training? ____ yes ____ no

Figure 6. PAT worksheet—Phase 1, Step 1.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 2. Determine the purpose and parameters of the analysis.

- Step 2a. Use the following chart to identify the salient characteristics of the decision maker, the analyst, and the organization and to record summary notes.

yes	no	characteristics	summary notes
		Organization Organization culture: climate for training; support for the training function; history of training in the organization; location of the training function in the organization; organization goals; organization philosophy; emphasis and objectives; values promoted by the organization; amount of consensus/conflict within the organization; legal, social, economic, and political factors inside and outside the organization	
		Reward structure	
		Political factors surrounding the situation	
		The organization's internal and external environment	
		Broader program of which training is an element	
		Supporting systems such as the selection, human factors, engineering, and work procedures	
		Terminology and language used in the organization	
		Other	

Figure 7. PAT worksheet—Phase 1, Step 2.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1 (Step 2a continued)			
yes	**no**	**characteristics**	**summary notes**
		Analyst Internal/external consultant	
		Biases, attitudes, beliefs and values	
		Skill level	
		Type of power	
		Style and experience of the analyst	
		Other	
		Decision makers Expectations of the decision makers	
		Amount of support for training	
		Amount of consensus among decision makers	
		Style and experience of the decision makers	
		Skill level of the decision makers	
		The level of the decision makers' position in the organization	
		Other	

Figure 8. PAT worksheet—Phase 1, Step 2 (continued).

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1
(Step 2 continued)

- Step 2b. Using the information from Step 1 and Step 2a, determine the purpose and the parameters of the performance analysis for training. Specify the purpose of assessment, the kinds of information to be gathered, the resources available to conduct the analysis, the boundaries of the needs assessment, the type of needs assessment, the format of the report, the recipient(s) of the report, and the criteria that will be used to evaluate the analysis process, the proposed solutions, and the product.

- Do the decision makers and the analyst agree about the purpose and parameters of the analysis? A number of strategies can be used to negotiate this agreement. But do not proceed with the assessment until there is agreement.

- Is the agreement appropriate based on the organization's salient characteristics? yes no

Figure 9. PAT worksheet—Phase 1, Step 2 (continued).

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 3. Gather information about potential training opportunities/needs

- On the checksheet below indicate the actions taken by making a check in the yes or no column. Record summary notes about the results.

yes	no	actions	notes
		Begin the process at the most general level and proceed to the most specific.	
		Use multiple sources and information gathering methods.	
		Gather both quantitative and qualitative information.	
		Examine current and future performance expectations.	
		Examine current performance.	
		Identify measures of the performance.	
		Gather information about possible causes and potential solutions.	
		Gather information about potential trainees.	
		Identify those who support and those who do not support the training opportunities/needs.	
		Identify subject matter experts.	
		Use the Solution Finder (Swanson & Sisson, 1985) to identify potential training and management solutions.	
		Renegotiate the purpose and parameters of the analysis if necessary.	

Figure 10. PAT worksheet—Phase 1, Step 3.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 4. Gather anecdotal information.

- Gather and record examples of anecdotes, stories, vocabulary, and examples of positive or negative experiences that can be used in the instruction or that can be used to describe the training need. Record the sources and the context.

Figure 11. PAT worksheet—Phase 1, Step 4.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 5. Analyze Information.

- On the checksheet below indicate the actions taken by making a check in the yes or no column. Record summary notes about the results.

yes	no	actions notes
		Verify data analysis with those who provided the data input if possible.
		Determine causes of performance issues.
		Identify training and non-training issues.
		Determine solution alternatives.
		Determine criteria for selecting solutions.
		Prioritize potential opportunities.
		Forecast the financial benefits of selected options relative to the organization's bottom line.
		Renegotiate the purpose and parameters of the analysis if necessary.

Figure 12. PAT worksheet—Phase 1, Step 5.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 6. Report the findings to decision makers.

- On the checksheet below indicate the actions taken by making a check in the yes or no column. Record summary notes about the results.

yes	no	actions	notes
		Explain why the performance analysis for training was done.	
		Describe how the information was gathered.	
		Identify the stated need.	
		Include the findings of the performance analysis for training.	
		Identify training and nontraining solutions.	
		Identify the most appropriate training solutions.	
		Specify the forecast costs and benefits of the solutions.	
		Specify the significance of the findings so that the client's so what question is answered.	
		Do action planning with the client.	
		Other.	

Figure 13. PAT worksheet—Phase 1, Step 6.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 7. Decision makers acknowledge, prioritize, and determine the training opportunities/needs.

- The decision makers identify the specific performance opportunities/needs for which training resources should be allocated.

Figure 14. PAT worksheet—Phase 1, Step 7.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 2. Work Behavior Analysis

Identify and document the specific behaviors needed to accomplish the work.

Step 1. Identify the work to be analyzed.

- Based on the decisions made in Step 7 of Phase 1, specify the work that will be analyzed.

Step 2. Construct a work behavior analysis plan.

- Use the work factors and analysis methods table to determine the combination of work behavior analysis methods that will be used.

Analysis Methods Work Factors	General Work Analysis	Specific Work Behavior Analysis		
	Job Description and Task Inventory	Procedure Analysis	Process and Troubleshooting Analysis	Subject Matter Analysis
work behaviors	• prerequisites	• observable	• partially observable	• non-observable
work interactions	• variety	• worker/materials • worker/machine	• worker/process	• worker/worker • worker/idea
work structure	• degree	• bound to a particular work procedure	• bound to a particular process	• many performance situations
worker autonomy	• worker-supervisor relationships	• follows procedures	• works within established systems	• works within vague or fluid systems
training objectives	• not obtainable from this level of analysis	• ability to follow correct procedures, leading to standard performance	• ability to use efficient methods, leading to standard performance	• ability to use structured knowledge, information, leading to standard performance or results
in-process products	• existing job description • interview notes	• task details • sketches	• system flow chart • equipment parts and purposes list • process analysis chart	• behavioral data collection instruments • collected data • research cards from literature search • synthesis model(s)
end product of the analysis	• 50-150 word narrative overview • list of discrete job tasks	• diagram of machine or material • step-by-step procedure	• troubleshooting analysis	• subject-matter description (may include synthesis model) • reference list

Work factors and analysis methods.

Note: From *Performance at Work: A Systematic Program for Analyzing Work Behavior* (p. 235) by R. A. Swanson and D. Gradous, 1986, New York: Wiley.

Figure 15. PAT worksheet—Phase 2, Steps 1 and 2.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 2

Step 3. Conduct the work behavior analysis.

- Select the appropriate Training Technology System forms and complete the general and specific work behavior analyses as specified in *Performance at Work: A Systematic Program for Analyzing Work Behavior* (Swanson & Gradous, 1986).

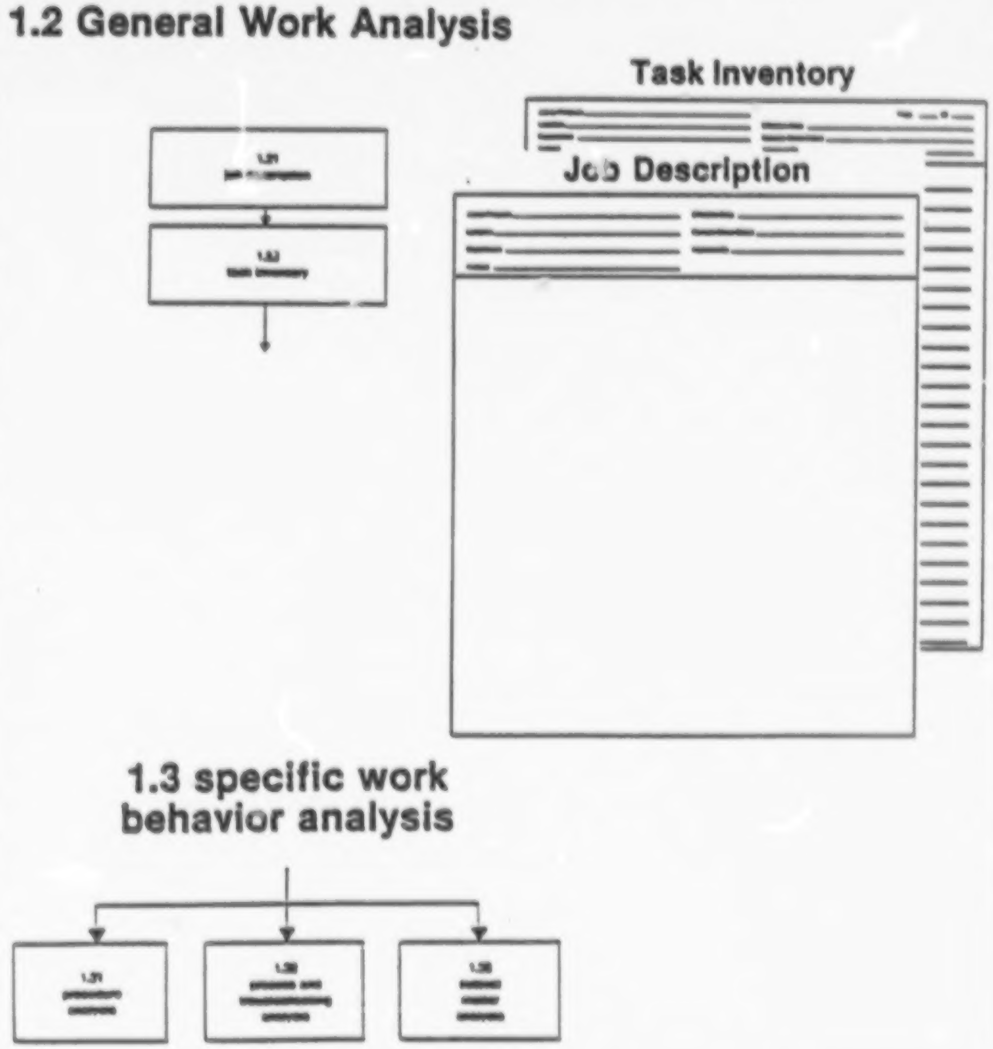

1.2 General Work Analysis
Task Inventory
Job Description
1.3 specific work behavior analysis

Figure 16. PAT worksheet—Phase 2, Step 3.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

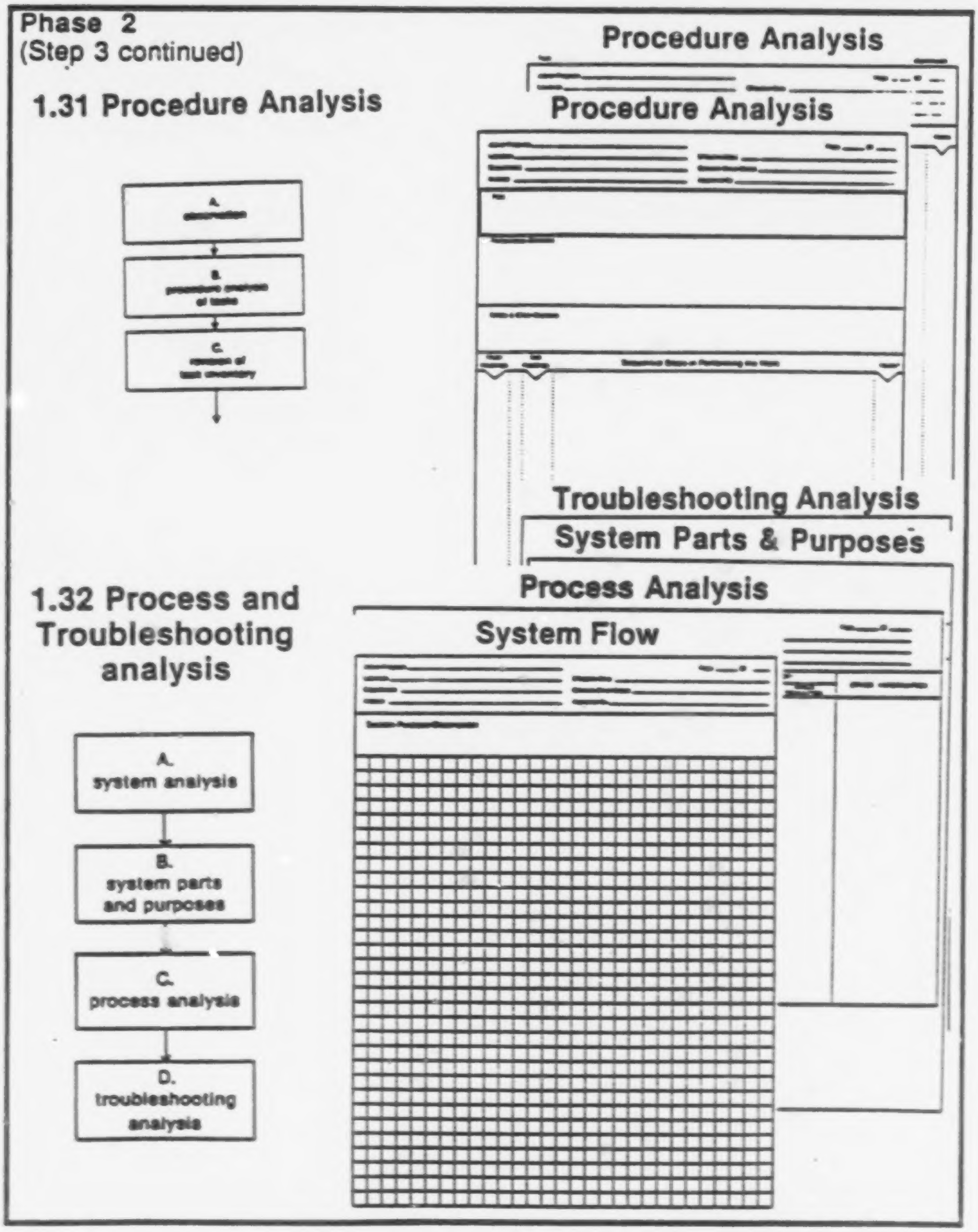
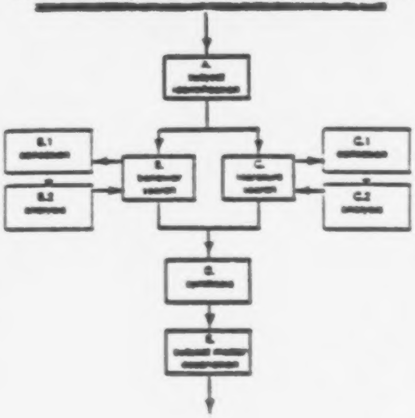

Phase 2
(Step 3 continued)
1.31 Procedure Analysis
A.
B.
procedure analysis
of tasks
C.
revision of
task inventory
Procedure Analysis
Procedure Analysis
Troubleshooting Analysis
System Parts & Purposes
Process Analysis
System Flow
1.32 Process and Troubleshooting analysis
A.
system analysis
B.
system parts
and purposes
C.
process analysis
D.
troubleshooting
analysis

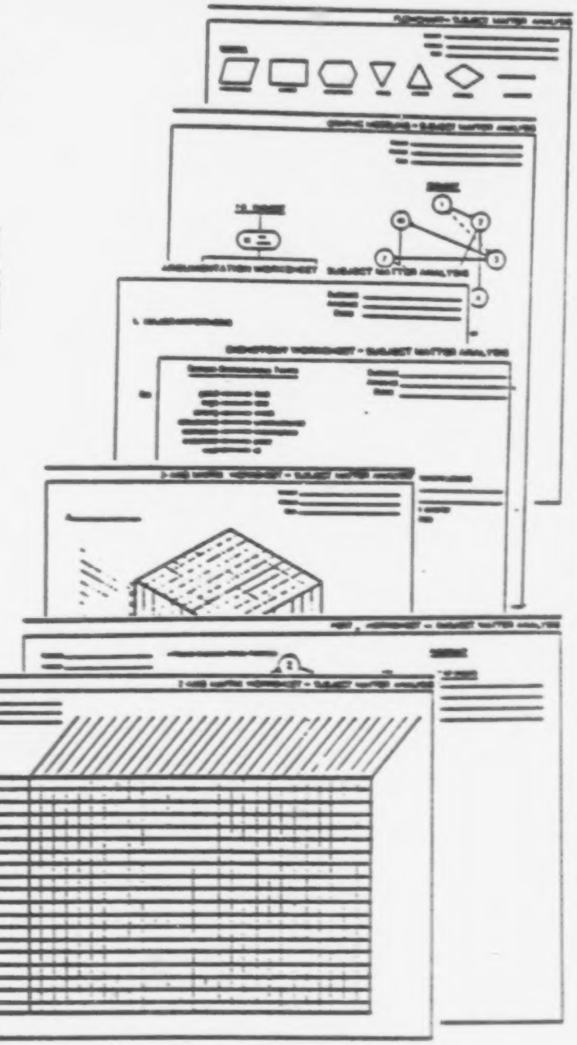
Figure 17. PAT worksheet—Phase 2, Step 3 (continued).

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 2
(Step 3 continued)

1.33 Subject Matter Analysis





Subject Matter Description

Step 4. Gather anecdotal information.

- Gather and record anecdotes, stories, examples of positive and negative experiences, and vocabulary that can be used in the instruction. Record the sources and the context.

Figure 18. PAT worksheet—Phase 3 (continued) and Step 4.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 3. Analysis of Individual Capabilities

Determine which employees need training and the kind of training they need.

Step 1. Identify characteristics and capabilities of the group of trainees.

- Identify "real" measures of job performance and record them.

- Identify the target population and their characteristics.

Step 2. Gather anecdotal information.

- Gather and record anecdotes, stories, examples of positive and negative experiences, and vocabulary that can be used in the instruction. Record the sources and the context.

Figure 19. PAT worksheet—Phase 3, Steps 1 and 2.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 3

Step 3. Gather Information About Nontraining Causes of Performance.

- Gather and record information about the nontraining components of performance, including work design, aptitude, and motivational issues.

Step 4. Synthesize and analyze information.

- Determine the knowledge, skills, and attitudes that persons need to accomplish the work. On the checksheet below indicate the actions taken and record summary notes about the results.

yes	no	actions	notes
		Review the information gathered during Phases 1, 2, and 3 of the analysis.	
		Use the Solution Finder (Swanson & Sisson, 1985) to identify potential training and management solutions.	

Figure 20. PAT worksheet—Phase 3, Steps 3 and. 4

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 3

Step 5. Report the findings to the decision makers

- On the checksheet below indicate the actions taken and record summary notes about the results.

yes	no	actions	notes
		Explain why the performance analysis for training was done.	
		Describe how the information was gathered.	
		Communicate the anecdotes to the decision makers.	
		Include the findings of the performance analysis for training.	
		Specify the significance of the findings.	
		Do action planning with the client.	
		Other.	

Step 6. Communicate the findings to those who will design the training.

- Communicate the findings of the analysis.
- Communicate meaningful anecdotes.

Figure 21. PAT worksheet—Phase 3, Steps 5 and 6.

CHAPTER 4

VALIDATION OF THE PERFORMANCE ANALYSIS FOR TRAINING MODEL IN AN ORGANIZATION: METHOD AND RESULTS

This chapter addresses the second research question: Given the development of the Performance Analysis for Training Model, is it a valid tool for determining an organization's training needs? This validation required going beyond the process of determining the content and face validity of the PAT model, as was described in Chapter 3, to determining whether the PAT model, when implemented in an organization, produced the expected results.

The specific outcomes that were expected to be achieved by implementing the PAT Model were (a) involving the organization's decision makers in the training process, (b) providing the organization's decision makers with accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of the organization, and (c) providing information useful for the design, development, implementation, and evaluation of training. In addition, implementing the PAT model was expected to result in a process of determining training needs that involved interaction based on the characteristics of the organization, the analyst, and the decision makers. This chapter describes both the method used to answer the research question and the results that were obtained.

Method Used to Validate the PAT Model Based on Implementation Results

This section describes the criteria for selecting the method used to validate the PAT model, background information about using a deductive research model with qualitative data, and a description of the methodology used in answering the second research question.

Criteria for Selecting the Method Used for Validating the PAT Model

Prior to selecting a method for validating the PAT model, the investigator identified the following criteria tha the method would have to meet: (a) the method had to be appropriate for use in organizational research, (b) the method had to rely on deductive inferences as the basis for validation, and (c) the method had to be appropriate for use with qualitative data.

The first criterion, that the method be appropriate for use in organizational research, was established because fully validating the PAT model would require implementing the model in a functioning organization and examining the process and the results.

The second criterion, that the method rely on deductive inference, was established because the investigator wanted to implement the PAT model in an organization and judge the soundness of the model's inferences based on the results of implementing the model in a functioning organization. The expected outcomes to be achieved by implementing the PAT model had been specified. Examining the results achieved by implementing the PAT model in a functioning organization would either confirm the expected outcomes or refute them.

The third criterion, that the method be appropriate for use with qualitative data, was established because the investigator expected that words, rather than numbers, would serve as a more effective means for describing the implementation of the PAT model and the outputs that resulted.

In summary, the method to use to validate the PAT model was a deductive process using qualitative data.

Background Information About the Selected Method

In the research literature, qualitative data is most often associated with inductive rather than deductive research. However, two authors described the use of qualitative data in deductive research involving a single site (Lee, 1985; Miles & Huberman, 1984). Miles and Huberman, in their book *Qualitative Data Analysis*, provided the most inclusive description of using qualitative data in deductive research. In addition, Miles and Huberman provided a rationale for using a conceptual framework as the starting point for qualitative research. They also provided specific suggestions, related to sampling, instrumentation, data analysis, and drawing and verifying conclusions.

Using a conceptual framework as a starting point of qualitative research. Miles and Huberman (1984), in describing qualitative research, stated that with a deductive model "we begin with some orienting constructs, extract the questions, then line the questions up with an appropriate sampling frame and methodology" (p. 34). Miles and Huberman also described the relationship between the general constructs and a conceptual framework. They used the term *bins* to describe groups of related events and behaviors within a conceptual framework:

> Theory building relies on a few general constructs that subsume a mountain of particulars. Terms such as "social climate," "stress," or "role conflict" are typically labels (*sic*) we put on bins containing a

> lot of discrete events and behaviors. . . . Bins come from theory and experience, and (often) from the general objectives of the study envisioned. Laying out those bins, giving each a descriptive or inferential name, and getting some clarity about their interrelationships is what a conceptual framework is all about. A conceptual framework explains, either graphically or in narrative form, the main dimensions to be studied—the key factors, or variables—and the presumed relations among them. (p. 28)

Miles and Huberman (1984) also noted that the elaboration of a framework sets up the research questions. The research questions focus on what is in the bins and how the bins are related.

Sampling. Miles and Huberman (1984) took the position that sampling decisions are driven in large part by the conceptual framework and the research questions. They noted that sampling involves decisions about settings, events, social processes, and about which people should be interviewed or observed. Miles and Huberman also identified some differences, related to sampling, between qualitative and quantitative studies. For example: (a) Qualitative researchers usually work with smaller samples of people in fewer global settings than do survey researchers, (b) the samples tend to be more purposive than random, and (c) the samples in qualitative studies can change. The samples in qualitative research tend to be more purposive than random because the initial definition of the universe is more limited and because social processes have a logic and coherence that random sampling of events or treatments usually "reduces to uninterpretable sawdust" (p. 36).

One similarity in qualitative research and quantitative research is that sampling is related to issues of generalizability (Lee, 1985; Miles & Huberman, 1984). Lee argued that a case study can be scientific even if it pertains to only one organization. He described how generalization can be accomplished through further efforts to test an explanation by testing the predictions or hypotheses that follow from it. Testing the explanation to achieve generalizability avoids the difficulty that positivism encountered with the verifiability criterion of meaning where additional observations can be found to support an explanation, even when the explanation is false.

Gathering and analyzing the data. The qualitative researcher can use data-collecting devices that are keyed to the conceptual framework and the research questions. Miles and Huberman (1984) discussed the questions of whether data collection instruments should be designed prior to going out in the field and how much structure the instruments should have. They posited that the answers to these questions depend on the conceptual focus, the research question, and the sampling criteria. For example, minimal prior instrumentation is more appropriate when the parameters and dynamics of a social setting are unknown. Heavy preinstrumentation is the logical choice with focused research questions and a well-bounded sample of persons, events, or processes. Miles and Huberman stated that "using validated instruments, and using them as they are designed is the best guarantee of dependable and meaningful findings" (p. 43).

Miles and Huberman (1984) advised researchers that instruments can and should be revised during the field study. They argued that instruments can be modified steadily for such things as exploring new leads, addressing a revised research question, and interviewing a new class of informants.

Continuous revision of the instrument puts qualitative research at odds with traditional survey research, in which the reliability of the instrument is based on its stability. For example, the test-retest reliability of a survey instrument is based on the assumption that the instrument has not changed. Miles and Huberman (1984) stated that "in qualitative research, issues of instrument validity and reliability ride largely on the skills of the researcher. Essentially, a person, who is more or less fallible, is observing, interviewing, and recording, while modifying the observation, interviewing, and recording devices from one field trip to the next" (p. 46). They suggested that the best investment is to find researchers with the following characteristics: some familiarity with the phenomenon and the setting under study, strong conceptual interests, a multidisciplinary approach, and good investigative skills.

Miles and Huberman (1984) described the data collection process. The data are usually collected in the form of handwritten field notes, which are then converted into write-ups. The field notes are often sketchy and in a form that can be understood only by the field worker. A write-up is described as "a product intelligible to anyone, not just the fieldworker" (p. 50). The data, as contained in the write-ups, can be analyzed.

According to Miles and Huberman (1984), analysis consists of three concurrent flows of activity: data reduction, data display, and conclusion drawing/verification. Data reduction includes choosing data chunks for coding and identifying patterns that summarize a number of chunks. Data display includes organizing information to permit drawing conclusions and taking action. One form of data display that has been used frequently in the past is narrative text. Miles and Huberman described narrative text as being cumbersome, dispersed, sequential, and poorly structured. They suggested, instead, that the data be assembled in matrices, graphs, networks, and charts. This puts the data in a compact form so that the analyst first can see what is happening in a well-organized display and then can draw conclusions. "In the course of our work," Miles and Huberman stated, "we have become convinced that better displays are a major avenue to valid qualitative analysis" (p. 21).

Conclusion drawing/verification is the third flow of activity. According to Miles and Huberman (1984), conclusion drawing begins to take place from the beginning of the data collection activity. The investigator should hold lightly the conclusions that are drawn at the beginning of the research. However, the conclusions tend to become increasingly explicit and grounded as the research proceeds. The conclusions that are being drawn must also be confirmed. As Miles and Huberman stated, "The meanings emerging from the data have to be tested for their plausibility, their sturdiness, their 'confirmability,' that is, their validity. Otherwise, we are left with stories about what happened of unknown truth and utility" (p. 22).

Miles and Huberman (1984) identified a number of tactics that an investigator can use to draw and verify conclusions. One tactic is to get feedback from the informants. With this tactic, local informants act as judges to evaluate the major findings of the study. The local informants should know more about the realities of the setting than the investigator does and can give feedback about the accuracy of the data. In giving feedback, however, the investigator should think very carefully about feeding back any specific incident.

They noted that one should ask whether anyone's self-esteem, job chances, or standing in the organization will be damaged by the report.

Another tactic is to check out rival explanations. Miles and Huberman (1984) noted that the analyst who has spent considerable time on a project may not have the cognitive distance to imagine alternative explanations. Colleagues can play this role. They suggested asking colleagues the following question: "Here's how I see it and here's why I see it this way. Can you think of another way to look at it?" (p. 241).

Michael Q. Patton, author of the book, *Qualitative Evaluation Methods* (1980), in private conversation with the investigator on May 17, 1990, indicated that having experts evaluate a model and the results of a model is an example of the connoisseurship type of evaluation that was described in his book. With the connoisseur approach to evaluation, Patton stated, the image is that of the evaluators as connoisseurs making critical appraisals of programs. Patton also suggested that with this type of evaluation, it would be more appropriate to ask the experts to what extent and in what way they perceived that the model worked than to ask the experts a dichotomous question that required a yes or a no answer about whether the model was valid. Patton stated that more information is gathered with the inductive line of questions.

Application of the Method to the Second Research Question

The purpose of this section is to review the methodology used to answer the second research question: Is the Performance Analysis for Training Model a valid tool for determining an organization's training needs? This section includes the methodological decisions related to the issues discussed in the previous section and the decisions that arose from the specific research question.

Using the deductive research model. The research design was based on the deductive research model described by Miles and Huberman (1984) for use with qualitative data. The conceptual framework for this research was the PAT model as presented in chapter 3. The PAT Model described the key factors in the process of determining the performance needs of organizations to be addressed with training and the presumed relationships among the factors. The PAT Model served as the basis for the second research question of the study—whether the PAT Model was a valid tool for determining an organization's training needs.

Sampling decisions. The second research question guided the sampling decisions. The organization in which the PAT model was implemented was purposefully selected. When selecting the organization, the investigator considered the biases that could result from the effects of the researcher on the organization. Deal (1986) wrote that, when he had worked in organizations trying to understand their cultures, he had not *behaved* as a researcher. Deal said that, if his conversations were ever perceived as interviews or if people ever suspected that he would somehow violate their trust by portraying their experience in a negative way, he would be "tossed out on his ear" (p. 22).

In considering the effects of the research on the organization, the investigator recognized that the PAT Model took into consideration the effect of the analyst on the determination of training needs but did not take into account the additional effect of a researcher.

To minimize researcher effects, the investigator implemented the PAT Model in an organization where the training manager had solicited an external consultant to work in conducting a training needs assessment. The pseudonym for the organization is Money Systems Company (MSC). The investigator was positioned in MSC as an analyst rather than as a researcher. Although all the participants in the project were aware of the investigator's role as a researcher, it was hoped that all involved would focus primarily on the researcher's role as analyst and on the determination of their organization's training needs.

Because validating a needs assessment model within a functioning organization required the collection and analysis of large amounts of descriptive information over a period of time, it was practically and financially impossible to test the model in multiple organizations. Therefore, the PAT model was tested in only one organization.

Ethical Issues Related to Implementing the Research

Because of the type of questions being addressed with this research and the probability that the investigator would be faced with conflicting values and a number of choices, the ethical principles identified by the American Anthropological Association (cited in Spradley, 1979) were used in guiding the decisions made during the investigation.

The informants' interests were considered first. This ethical principle recognizes that the investigator's primary responsibility is to those who are being studied. One implication of this principle was that the interests of the individuals being studied were considered before either the interests of the investigator in completing the research or the interests of the sponsor who provided funds for the research.

Steps were taken to safeguard the informants' rights, interests, and sensitivities. Based on this ethical principle, the implications of the research were considered from the vantage point of the informants. As Spradley noted, "Ethnographic interviewing represents a powerful tool for invading other people's way of life. It can reveal information that can be used to affirm their rights, interests, and sensitivities or to violate them" (p. 36). Based on this principle, a specific decision was made not to record an individual's off-the-record comments in the field notes. Also based on this principle, the researcher decided to present only synthesized information to the decision makers within the organization.

The research objectives were communicated to the informants. This principle recognizes that the individuals who are interviewed have the right to know the investigator's aims. The investigator informed each individual who served as an informant in the research study that the information being collected would be used by the training department to develop training and that it would also be used in research about the process of determining training needs.

The privacy of individuals was protected. This principle recognizes that individuals who participated in the research have the right to remain anonymous if they wish. In the final research report, the names and identifying characteristics of the organization and the individuals were changed. The investigator did not identify the specific sources when discussing the findings with decision makers within the organization.

The informants were not exploited. The needs of the informants to gain something from the research effort were not ignored. Most informants in this research study expressed pleasure that they had an opportunity to express their views about the performance needs of the organization and to have those views considered when decisions were made about training needs.

Make reports available to informants. This principle was not followed because making a report that detailed the characteristics of the organization and the decision makers generally available to members of the organization could violate the principle of considering the informants' interests.

Collecting and analyzing the data. The process of collecting data to answer the second research question was structured by the PAT model. The PAT worksheets described the information to be gathered and the actions to be taken at each step in the process of determining training needs. The information that was required for completing the worksheets guided the investigator-analyst in making decisions about which people to use as sources of data and which settings, events, and social processes to sample within the organization.

The investigator identified steps that could be taken to assure that the information collected was valid and reliable. Pelto and Pelto (1978) cited the importance of reliability and validity in qualitative research in anthropology: "Anthropological researchers have usually tried to maximize validity and, to some extent, reliability through the use of an eclectic mix of research operations" (p. 34). They further noted that blending the use of relatively unstructured, long-term observations and interviews with the more structured interviews and using more formalized procedures enhanced reliability and replicatibility.

Data-source triangulation was also used in collecting information. According to Hammersley and Atkinson (1983), data-source triangulation involves comparing data that are related to the same phenomena but that are derived from different phases of the fieldwork, different points in the temporal cycles that occurred in the setting, or the accounts of different participants involved in the setting. The use of multiple, in-depth, data-gathering techniques from different sources of data provides a mechanism to assure the gathering of both conflicting and corroborating information about the organization's training needs.

The specific data-gathering methods that were used to collect information in this research study were observation, interviews, review of written documents, and questionnaires.

Two techniques were used to assure the accuracy of the observations and interview notes—the verbatim technique and the language identification technique. Spradley (1979) described each of these techniques in detail.

The language identification principle can be simply stated: "Identify the language used for each field-note entry" (Spradley, 1979, p. 71). This principle recognizes that a number of different uses of language, or specialized vocabularies, are involved in most situations and that the investigator must select a language, or vocabulary, when writing the field notes. The goal is for the written record to reflect the languages, or specialized vocabularies, that were used in the actual field situation. Using this principle in writing field notes can involve recording the speaker's name or setting details off in parentheses, quotation marks, or brackets.

The verbatim principle involves recording the exact words that people say rather than the investigator's interpretation of what people say. The way people speak provides clues to their culture. Consequently, it is important to distinguish between the native speaker's terms and the investigator's terms. Recording word for word what people say helps the investigator avoid the natural tendency to translate what is said during the interview into his or her own words. Using the verbatim principle requires identifying the speaker in the field notes and using some method for distinguishing each speakers' words (e.g., parentheses, quotations marks). This method also helps the investigator produce a record that reflects the differences in the language used by the individuals in the actual field situation, rather than just the investigator's language.

In a field situation, it is not possible for the investigator to record all the information. Therefore, it was decided to follow Spradley's (1979) method of collection in the field and to set down a partial verbatim record rather than a complete nonverbatim summary.

In reviewing organization documents as a source of information, the investigator noted the source of the document and the over-all message in the document.

In using a questionnaire to collect information, decisions were first made about the purpose of the questionnaire and how the information would be used. Interviews and observations served as the basis for the questionnaire. Also, the questionnaire was pilot tested. To establish that the instrument was targeted and worded such that it would collect the desired kind of information, a manager in the organization reviewed the instrument before it was sent to the respondents. To assure that each respondent returned his or her questionnaire, the questionnaires were coded, and the respondents were informed that individual responses to the surveys would not be identified by name. The investigator followed up with phone calls to individuals who did not return the questionnaires.

In this study, write-ups were used to organize the investigator's data. The investigator recorded detailed field notes of all the activities related to implementing the PAT Model in an organization. In addition, the investigator recorded her perceptions about how the organization, analyst, and decision maker characteristics influenced the needs assessment process and product. The investigator then converted the field notes into write-ups that were organized chronologically by event (See Appendix F). A total of 59 events were reported. The write-ups provided a case study of what happened when the PAT Model was implemented in an organization, but the names and other identifying facts were changed to protect the identity of the company and individuals within the company. The investigator's perceptions about how the organization, analyst, and decision maker characteristics influenced the determination of training needs were recorded as footnotes (See Appendix F).

The write-ups detailed the mix of research operations used in implementing the PAT Model. The operations that were used included interviews, observations, questionnaires, and review of written records. The research operations included (a) unstructured, long-term observations and interviews and (b) more structured interviews. In addition, the investigator used the language identification and verbatim principles when recording field notes for research purposes.

The data-source triangulation used in collecting the data was recorded in the write-ups. The consistencies and contrasts in the data gathered from different sources and at different times were described in the text.

Summary of the implementation of the PAT Model in an organization. The implementation of the PAT Model in an organization involved during each phase a number of data gathering activities as well as interaction with various people. During Phase 1, organization analysis, the investigator reviewed written documents, interviewed employees, and observed workplace behavior to determine where in the organization the training emphasis should be placed. The written documents that were reviewed included product descriptions, a monthly financial report, a statement about the company's reorganization, the management compensation manual and performance appraisal forms, a handout describing "The Four Management Styles of Organizations," and three strategic plans—one for the company, one for the Human Resources Department, and one for the training and development area. In addition, the investigator reviewed documentation specifically related to training. The training-related documents included training program announcements, registration forms, evaluation forms, and training guides. A list of the managers who support training by sending large numbers of their employees to training programs and a copy of a sales needs assessment currently being implemented were also reviewed.

The data gathering for Phase 1 also included interviews with the organization's seven vice presidents, a regional manager in the organization, the manager of operations, and the training department staff. The observations of workplace behavior included the observations that occurred during a tour and orientation of the organization given by an employee specialist, as well as the observations that took place during the interview process. The investigator was also asked to attend two formal presentations given by external vendors for the training department.

Four training priority training needs were identified as a result of the organization analysis—planning, project management, decision making, and customer service training for financial professionals. Customer service training for financial professionals was determined by decision makers in the organization to be the need that would receive further analysis.

During Phase 2, work behavior analysis, the investigator used the analysis method of subject matter analysis (Swanson & Gradous, 1986) to identify and document the specific behaviors needed by financial professionals related to customer service. The investigator collected information about customer service behavior in the workplace by interviewing three financial professionals. The information from the interviews was analyzed by typing up the notes and looking for similarities in the information that was gathered. To learn what other theorists and expert practitioners have thought or done in similar situations, the Investigator also identified and reviewed printed material on the subject of customer service for financial professionals. The books that were reviewed were *Commercial Banks Amid the Financial Revolution: Developing a Competitive Strategy* by Ballarin (1986), *Achieving Quality in Financial Service Organization; How to Identify and Satisfy Customer Expectations* by Grasing and Hessick (1988), *Reinventing the Corporation* by Naisbitt and Aburdene (1985), and *Service Management: Strategy and Leadership in Service Businesses* by Norman (1984). In addition, a chapter of

Hackman's (1990) book *Groups That Work (and Those That Don't)* that focused on professional support teams was reviewed. The chapter was titled "Summary: Professional Support Teams" (Davis-Sacks, Dennison, and Eisenstat, 1990).

The Investigator reviewed written company documents related to the financial positions. These documents, titled Position Description Questionnaires (PDQs), contained self-reported information about the job. The documents included a managerial/supervisor checklist of items that applied to the job, a graphic representation of an organizaiton hierarchy for showing the relationships of the job and the number of people supervised, the job description, the description of the primary purpose and duties and responsibilities of the job, time allocation for duties, the internal and external contacts required for the job, the major decisions, the problem solving, and the use of judgement. The individual also identified the quantitative dimensions of the job, required knowledge and skills, licenses/certificates, and additional information. The articles and books were abstracted and important passages were quoted.

Using two-axis matrices and a dichotomy,.the investigator synthesized the information that had been gathered One two-axis matrix was used to examine the characteristics of professional support teams and the comments made by each of the interviewees. The other two-axis matrix was used to examine the customer service techniques used by each interviewee. The dichotomy was used to compare past and present characteristics of the financial services industry, characteristics of organizations in general, and characteristics of the accounting role in organizations.

The synthesized information served as the basis for the subject matter description which was titled "Customer Service for Financial Professionals." The subject matter description contained four major topics: (a) why customer service is important for accounting professionals at Money Systems Company, (b) the role of accountants in the organization affects quality and customer service, (c) background information about the process of customer service, and (d) customer service techniques that can be used to influence the quality of the interaction between the contact person and the customer. The vice president of finance reviewed the completed subject matter analysis and gave his approval.

During Phase 3, analysis of individual capabilities, a survey was used to determine which employees needed training and the kind of training they needed. Eleven financial professionals in the organization were asked to complete the customer service survey for financial professionals at MSC. The survey contained the following items:

(1) Is providing service to customers part of your job?

(2) Who are your customers?

(3) How is the job performance of providing customer service measured at MSC?

(4) What training have you received in customer service?

(5) To the accounting professionals at MSC, how important is customer service?

(6) Please estimate the present level of skill that accounting professionals at MSC have in providing customer service.

(7) Rank the following possible training topics based on how important they are to you with #1 being the most important and #4 being the least

important why customer service is important for financial professionals, the role of professional support teams in the organization, background information about the process of customer service, and specific techniques that can be used at MSC to improve customer service interaction.

(8) Please describe an instance of outstanding customer service that has involved financial professionals at MSC.

(9) Please describe an instance of poor customer service that has involved financial professionals at MSC. The responses to the survey items were analyzed and reported to the Vice President of Finance.

The final report for the needs assessment project was presented to the Vice President of Financial Services and to President of the MSC.

Results

This section details the results of the implementation of the PAT Model in an organization, the validation of the PAT Model by decision makers in the organization, and the validation of the PAT Model by experts in the field of training needs assessment.

The data analysis methods used in this research included data reduction, data display, and conclusion drawing/verification. Data reduction was the first analysis activity. It involved separating data that would be used from data that would not be used. Data reduction also included looking for patterns of events.

Several data reduction steps were involved in this research. First, some data reduction occurred during the collection of information about the organization's training needs. That is, when the investigator made decisions about what to record in the field notes and write-ups, data reduction was taking place. In addition, the investigator looked for patterns to identify information that corroborated previously gathered information and information that contradicted previously gathered information. Whenever the information was determined to be contradictory, additional information was collected for the purpose of explaining the conflict.

Second, data reduction occurred when information was recorded on the PAT worksheets. Data reduction also occurred during the implementation of the PAT model because the model included data analysis steps related to grouping different kinds of data. The specific data reduction activity at each of these analysis steps is recorded in the write-ups.

Data display was the second analysis activity. It involved assembling and organizing the data. The PAT worksheets served as a tool for displaying the information that was gathered related to the determination of the organization's training needs. The completed PAT worksheets are in Appendix G.

Conclusion drawing/verification was the third analysis activity. This activity involved a three-pronged approach. The first involved a review by two decision makers, MSC's president and MSC's vice president of finance, of the outcomes that resulted from implementing the PAT model. For this review, the investigator used the following procedure: First, the investigator presented each decision maker separately with the final report for the project. Second, after each decision maker had reviewed the document, the investigator asked the decision maker, based on the report, what action he would take related to training. Third, after the decision maker had articulated his decision related to training, the investigator asked the decision maker questions related to the process that had been used to determine the training needs based on the implementation of the PAT model. Last, each decision maker was asked whether he had (a) been involved in the training process, (b) obtained accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of MSC, and (c) obtained sufficient information for designing, developing, implementing, and evaluating training. Both decision makers, the president of MSC and the vice president of finance, responded affirmatively to all three questions. In this manner, the key decision makers in the organization validated the PAT Model.

The second prong of the conclusion drawing/verification activity involved review to determine whether, and to what extent, the analyst understood the characteristics of the organization and the decision makers. This review was also done by the president and the vice president of finance at MSC. Having people in the organization verify an investigator's understanding of the organization is a procedure identified by Fielding and Fielding (1986) as respondent validation. This procedure assured an accurate measure of the investigator's understanding of the organization. Respondent validation requires that the subjects whose beliefs and behavior are described recognize the validity of the account.

The procedure used for this review was as follows: First, after the decision maker had responded to the primary questions about the PAT process used to determine training needs, the investigator asked each decision maker to determine whether, and to what extent, the investigator had understood the organization and the decision makers.

Second, the investigator asked each decision maker to listen to her descriptions of the organization and of the the decision makers and to evaluate the accuracy of her perceptions. The investigator described the characteristics of the organization and decision makers as identified on the PAT worksheet for Phase 1, Step 2. The investigator also described the rhetorical rules used by insiders at MSC and the answers to the questions used by a researcher to discover the rhetorical rules of the organization culture. The documents used by the investigator are in Appendix N. Third, the investigator encouraged the decision makers to state if the investigator's perceptions were accurate or inaccurate and why they were accurate or inaccurate.

The results of this procedure were as follows: the vice president of finance thought that the investigator-analyst had described the organization exactly. The president agreed that the investigator-analyst had described MSC. However, he wondered if the analyst's description of the organization wasn't so generic that it would fit almost any organization.

The third prong of conclusion drawing/verification involved expert review of the investigator's written documentation of the process and the product that resulted from implementing the PAT model in an organization. The research design called for the experts who had determined the face and content validity of the PAT model to evaluate the effectiveness of the PAT model for determining training needs in an organization. At the time of this review, two experts who had determined the face and content validity of the PAT model were available to review this documentation. These experts were Dr. David Bjorkquist and Mr. Paul Habegger. Due to circumstances related to timing, one of the experts who had determined the content and face validity of the PAT Model, Dr. Gary Geroy, was not available for this review. Consequently, the investigator identified two additional needs assessment experts who were willing to perform the review. These experts were Mr. Tom Kramlinger and Ms. Susan Stanek. Kramlinger (1982) is coauthor of the book, *Figuring Things Out: A Trainer's Guide to Needs and Task Analysis.* He is also a senior consultant with Wilson Learning Company, where he has worked with a number of major organizations. Stanek teaches a graduate-level course on management training practices at the University of Minnesota. She works for Business Incentives, Inc., as an external consultant in training needs analysis, design, development, implementation, and evaluation.

To evaluate the effectiveness of the PAT Model for determining training needs in an organization, each of the experts independently reviewed the initial needs assessment proposal, the completed PAT work sheets, the final report given to the organization's decision maker, and the description of the implementation of the PAT Model in the financial organization.

Each expert then completed an evaluation form that contained six questions related to the effectiveness of the PAT Model for determining training needs in an organization (See Appendix O). The first question was, How useful was the PAT Model in determining the training needs in this case? Each expert answered this question using a five-point rating scale where 1 was labeled *not useful*, 3 was labeled *neutral*, and 5 was labeled *useful.* The second question was, How appropriate were the results from the PAT Model in this case? Each expert answered this question using a five-point rating scale where 1 was labeled *not appropriate*, 3 was labeled *neutral*, and 5 was labeled *appropriate.* The third question was, How much was the perception and prioritization of training needs in the organization influenced by the characteristics of the organization, the decision makers, and the analyst? Each expert answered this question using a five-point rating scale where 1 was labeled *not influenced*, 3 was labeled *neutral*, and 5 was labeled *significantly influenced.* The fourth question was, How well did the phases and steps of the PAT Model work together in this case? Each expert answered this question using a five-point rating scale where 1 was labeled *not well*, 3 was labeled *neutral*, and 5 was labeled *very well.* The fifth question was, How favorably does the PAT Model compare with other needs assessment models? Each expert answer this question using a five-point rating scale where 1 was labeled *not favorable*, 3 was labeled *neutral*, and 5 was labeled *very favorable.* The sixth question was, What additional comments do you have about the PAT Model? There was no rating scale for this question. Instead, each expert was encouraged to make comments.

The expert's numerical ratings are contained in Table 1.

Each expert responded to Question 6 by making both positive and negative comments about the effectiveness of the PAT Model. The positive comments tended to focus on the elements of the PAT Model. For example, Habegger noted that the influence of the analyst is one element that has seldom been considered in the needs assessment models that he has seen.

Table 1

Responses From Experts About Effectiveness of PAT Model

Question	Range*	Average N = 4
1. How useful was the PAT Model in determining the training needs in this case?	4-5	4.75
2. How appropriate were the results from the PAT Model in this case?	4-5	4.75
3. How much was the perception and prioritization of training needs in the organization influenced by the characteristics of the organization, the decision makers, and the analyst?	4-5	4.75
4. How well did the phases and steps of the PAT Model work together in this case?	4-5	4.50
5. How favorably does the PAT Model compare with other needs assessment models?	4-5	4.25

* Scaled 1 to 5, 5 being the most positive.

Kramlinger stated that the PAT Model is an improvement over the linear models of the 1970s that focused only on the steps and procedures needed to define a gap in performance. Kramlinger thought that a major contribution of the PAT Model is to articulate and make useful such things as the organization culture, the analyst's point of view, and the interaction of the decision makers. Kramlinger added that the model is a helpful tool to take to organizations to get agreement on what is involved in the needs assessment.

Kramlinger also stated that the PAT Model makes needs assessment a more human, rich, and difficult process. It requires a high level of competence on the part of the analyst to carry out this kind of an analysis.

Bjorkquist commented on the worksheet forms. He observed that the worksheets developed to implement the model provide excellent direction for and a means to record the process as well as the content of the needs assessment. The data on the forms provides the basis for the insights that come from reflections. The worksheets help to organize the information so that it is easier to find pieces of information as they are needed.

Stanek commented that the PAT Model highlighted the importance and influence of people and culture, which she has not seen in most training needs assessment models. The PAT Model also legitimizes the worth of qualitative data and the value of the stories told within the organization. She said that it gives the practitioner permission to listen to stories and a way to feed the information back to the organization. Stanek said that the format of the PAT Model was user friendly. It was easy to follow and reasonable in terms of length and availability of information.

On the other hand, the experts expressed concerns about the PAT Model and offered suggestions for improving it. There was a difference between the suggestions made by the experts who had previously reviewed the PAT Model for content and face validity and those who had not. The experts who had not previously reviewed the PAT Model tended to make more global suggestions for improving the model. For example, Kramlinger suggested that the PAT Model could be improved by adding a major subject area, the market. He would represent the market as a fourth and dominant lobe on the PAT Model. He said that, in his experience, needs analysis is not simply a passive research process, but an active intervention to improve the effectiveness of an organization in the market for products and services. The market area should include external items such as competitive forces, regulations, and customer expectations and internal items such as market plans, strategy, and critical success factors. The thrust of the needs analysis then becomes an answer to the question, Who needs to do (more of) what in order to succeed in the market? According to Kramlinger, the advantage of this approach is that it helps decision makers cut through their former prejudices about training, their internal squabbles, and their views about what will work or not work in this culture. It helps them focus on what kind of performance they need to succeed in the marketplace and to see training as a way to get that performance.

Kramlinger also suggested adding an item to the PAT Model to force decision makers to define key populations and the relationship of those populations to the market success of the organization. He added an example: The investigator might have been more successful in getting decision makers to agree on the need for training in management decision-making skills if she could have shown the decision makers how current decision making was having a negative impact on market success. (This was hinted at in the failure of the decision makers to reach true consensus on their strategic plan.) But there was no tool to show decision makers how their decision making was resulting in market failure.

As a final point, Kramlinger suggested that the analyst's checklist should include an item on the relationship between individual worker performance and market success. Very often this relationship is unknown to the client, and the consultant needs to illuminate the relationship. When the consultant does not focus on the needs of the marketplace, the whole needs analysis can wallow in the petty framework of the internal culture, and eventually it will settle on what can be done rather than what should be done to make the organization more effective and successful.

Stanek also suggested improvements in the Performance Analysis for Training Model. Stanek pointed out that the PAT Model could be used as a performance analysis tool by simply removing the words *for training* from the title and viewing the situation from a larger perspective. She added that the PAT Model had all the components of a performance analysis model.

From a user's perspective, Stanek suggested highlighting each phase and step in a different way because she sometimes had difficulty finding information about the phases and steps on the completed worksheet. Stanek also suggested deleting the yes/no portions of some of the checklists because the information did not seem to be valuable.

The suggestions made by the experts who had initially determined the face and content validity of the model were more focused. For example, one of Habegger's suggestions related to the recommendations in the final report submitted to MSC. Habegger thought that the recommendations section of the report should have more strongly reiterated the nontraining issues that had been identified earlier in the report. He also noted that the investigator appeared to have been closely allied with the vice president of finance. He stated that such alliances with funders sometimes can be problematic because of the possibility of backlash from other employees.

Habegger also pointed out that the PAT worksheet, like any other structured method, could invite an analyst to focus too much on filling in the blanks. It would be possible to follow an outlined procedure such as this and miss something in the situation.

Bjorkquist commented that the connection between the elements of the model and the phases of the study is not clear. He noted that, to him, the phases of study are more useful and directly related to the needs assessment process than are the elements of the model. He asked, " Is there a way to show the relationship?"

Bjorkquist commented that another system running through the event reports is the footnotes, and that it took him a while to realize that they represented an analysis of selected portions of the events. Bjorkquist asked how this analysis fit into the model. He also asked if the comments and observations of interviews and events were taken at face value. Bjorkquist also questioned if there is a verification step(s) in the model.

Conclusions

This section summarizes the findings of the validation study. One major finding was that the investigator's implementation of the PAT Model in the functioning financial organization resulted in the expected outcomes. Two decision makers, the president of the company and the vice president of finance, made training decisions based on the information that resulted from implementing the PAT Model in their organization. Beyond that, each decision maker confirmed that the process used to determine the training needs, based on the implementation of the PAT Model, resulted in the following outcomes: (a) he had been involved in the training process, (b) he had obtained accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of the MSC, and (c) he had obtained sufficient information for designing, developing, implementing, and evaluating training.

The president and the vice president of finance also evaluated the extent to which the analyst understood the characteristics of the organization and the decision makers. The vice president of finance thought that the investigator-analyst had described the organization and decision makers exactly. The President agreed that the investigator-analyst had described MSC. However, he questioned if the Analyst's description of the organization wasn't so generic that it would fit almost any organization.

Finally, four experts evaluated the effectiveness of the PAT Model for determining training needs in an organization There was clear agreement among the experts that the results from the PAT Model were appropriate in this case and that the components of the PAT Model worked well together. The experts also agreed that the perception and prioritization of training needs was influenced by the characteristics of the organization, the decision makers, and the analyst. The experts agreed that the PAT Model was better than most needs assessment methods presently being used in organizations. Even so, the experts' comments indicated that the PAT Model can be improved.

The validation process highlighted specific improvements that could be made to the PAT worksheets. First, the worksheet for Phase 1, Steps 2a and 3, could be modified by eliminating the yes and no columns to allow more space for recording summary notes. If an action or characteristic is not applicable, the abbreviation *na* can be written in the space. Second, the worksheet for Phase 1, Step 5, could be modified to include the following actions: (a) Analyst reviews the PAT worksheets for Phase 1, Steps 2, 3, and 4, and revises as needed and (b) Reflect on the information that has been gathered and gather additional information if needed. Third, the conceptual elements of the PAT

Model could be more clearly connected to the PAT worksheets. Figure 4, Conceptual elements that affect training decisions, could be modified to include the statements, "The three elements that affect decisions about training needs—organization characteristics, decision maker characteristics, and analyst characteristics—are operationalized in the worksheets. They are operationalized explicitly in Phase 1, Steps 2 and 5, and implicitly in the all the other phases and steps." Fourth, the worksheet for Phase 2 could be modified to include a step for reporting the documented behaviors to the decision maker, and a step for action planning the next phase with the decision maker.

CHAPTER 5

SUMMARY AND CONCLUSIONS

The purpose of this research was to develop and validate a Performance Analysis for Training Model. The premise for this study was that the lack of a performance-based training needs assessment model grounded in theory and research limited the efficiency and effectiveness of training professionals. The subproblems that were identified included the lack of research on assessing training needs, the difficulty that practitioners have in moving from theory to practice, and the frustrations that needs analysts face when the assumptions of their models and theories do not fit the realities of dynamic organizations.

To address the problem and subproblems, a Performance Analysis for Training (PAT) Model was developed and validated. The PAT Model incorporated both theoretical and practitioner perspectives on training needs assessment. Three training needs assessment experts then evaluated the content and face validity of the PAT Model.

In addition to the determination of content and face validity, the PAT Model was implemented in an organization to ascertain whether the predicted outcomes from using the model were achieved. Decision makers in the organization confirmed that the predicted outcomes from using the PAT Model had been achieved. Each decision maker used the information to make a decision about training. In addition, the decision makers reported that (a) they had been involved in the training process; (b) they had obtained accurate and sufficient information for making decisions about the contributions that training should make to the performance needs of Money Systems Company; and (c) they had obtained sufficient information for designing, developing, implementing, and evaluating training.

Utilizing all the PAT Model and research data, four experts in training needs assessment rated the effectiveness of the PAT Model. They found that, in this case, (a) the PAT Model was useful in determining training needs; (b) the results from the PAT Model were appropriate; (c) the perception and prioritization of training needs in the organization were significantly influenced by the characteristics of the organization, the decision makers, and the analyst; (d) the phases and steps of the PAT Model worked well together; and (e) the PAT Model was viewed more favorably than other needs assessment models.

The PAT Model was effective in guiding the analysis of an organization's performance problems and opportunities that could be addressed with training. Implementing the PAT Model in an organization served to highlight, from a practical perspective, what worked well and what improvements could be made in the model. There were a number of specific benefits from using the PAT Model.

First, individuals in the organization, including the manager of training and development, the vice president of human resources, and the president, were able to quickly understand the PAT Model conceptually. Each person perceived that the PAT Model could be effectively used in analyzing the organization's performance needs that could be addressed with training.

Second, the document—Phases and Steps of the Performance Analysis for Training (PAT) Model—was useful because it provided those who were involved in the needs assessment with an overview of the process and because it was instrumental in gaining commitment to the process. Each person who reviewed the document could easily see how his or her contribution was connected to the larger needs assessment effort and how the needs assessment was connected to organization performance.

Third, the PAT worksheets were useful to the investigator as a tool for guiding the implementation of the needs assessment, organizing the information that was gathered throughout the process, and highlighting key information.

Implementing the PAT Model in an organization highlighted improvements that should be made to the model. First, the worksheet for Phase 1, Steps 2a and 3, should be modified by eliminating the yes and no columns to allow more space for recording summary notes. If an action or characteristic is not applicable, that can be indicated in the space. Second, the worksheet for Phase 1, Step 5, should be modified to include the action, "Analyst reviews the PAT worksheets for Phase 1, Steps 2, 3, and 4, and revises as needed" and the action "Reflect on the information that has been gathered and gather additional information if needed." Third, the conceptual elements of the PAT Model should be more clearly connected to the PAT worksheets. The figure titled "Conceptual elements that affect training decisions" should be modified to include the statements "The three elements that affect decisions about training needs—organization characteristics, decision maker characteristics, and analyst characteristics—are operationalized in the worksheets. They are operationalized explicitly in Phase 1, Steps 2 and 5, and implicitly in the all the other phases and steps." Fourth, Phase 2 of the PAT Model should be modified to include a step for reporting the documented behaviors to the decision maker, and a step for action planning the next phase with the decision maker.

Conclusions

The study provides research in the area of training needs assessment. It addresses the difficulty practitioners have in moving from theory to practice by providing a theoretically sound model that includes a conceptual framework, a list of the phases and steps in the process, and worksheets.

Through the development of the PAT Model, assumptions that fit the realities of the dynamic organizations in which needs analysts work were identified. Furthermore, the detailed description of the process used to implement the PAT Model in a functioning organization provides a source of data for theoreticians and practitioners for gaining a deeper understanding of the process by which training needs are determined. The study highlights the dynamic nature of the needs assessment process. In this study, it was clear that the training needs were not simply identified, but rather were negotiated and rationalized.

This study provided evidence that implementing the PAT Model in an organization accomplished more than determining training needs. The interaction of the organization, decision maker, and analyst characteristics influenced the articulation of the training needs, and the interaction, in turn, had implications for the future of each of the elements. The needs assessment process served to clarify the organization's culture, that is, how things were done in the organization. After implementation of the PAT Model, training was more strongly perceived as a tool that could help improve the organization's performance. Implementation of the PAT Model had implications for the organizational system in that the results highlighted for organization members the lack of fit between the organization and the larger business environment. The implementation of the PAT Model also had implications for the politics in the organization. Some people, including the organization's manager of training and development, lost power through the process, and some people, including the vice president of finance, gained power. The implementation of the PAT Model also influenced the decision makers and the analyst. For example, implementation of the PAT Model caused the analyst and decision makers to describe the organization's nontraining needs, and it served to enhance professional networking. The process of implementing the PAT Model also provided a mechanism for setting up the environment for training and for the transfer of training skills to the job. In this instance, the implementation of the PAT Model was a complex process and the stakes were high for the individuals and the organization.

The limitations of this study are that it was conducted by a single analyst in a single organization. Thus, the research findings are applicable only to the organization that was studied.

Implications for Further Research

Three implications for further research have been identified.

1. Generalizability: The findings of the research are not generalizable beyond the organization studied. Generalizing the results of this study can be accomplished through further efforts to test the reliability and validity of the PAT

Model with variations of the elements, that is, different decision makers, analysts, and organizations.

2. The role of the analyst: The focus of the PAT Model was on the process of conducting training needs assessment. The study revealed that the successful implementation of the PAT Model in this situation required that the analyst have prerequisite knowledge, skills, and attitudes that went beyond an understanding of the process of conducting a needs assessment. For example, the study highlighted such things as the ability of the analyst to diffuse the anger of an interviewee, to be able to talk the language of a profit-making organization, and to be comfortable talking with individuals at all levels of the organization. The prerequisite knowledge, skills, and attitudes needed to implement the PAT Model in various organizations have not been fully documented. Such documentation is needed.

3. Understanding the process and product of a training needs assessment: This research may serve to challenge the undocumented assumptions behind most training needs assessment models, the processes used to implement them, and their resulting conclusions. The research findings further question the use of intuitive approaches for determining an organization's performance and training problems.

Needs assessment has been described as the touchstone for the activities of the the systematic approach to training (Noel & Hewlett, 1981). This research demonstrated that the needs assessment process is complex, with significant consequences to the individuals and to the organization. To be most effective in using a needs assessment process requires training professionals to go beyond an intuitive approach to needs assessment. It requires that they acquire the ability to describe, predict, control, and explain the process and product of needs assessments. It is believed that the development and validation of a Performance Analysis for Training Model is a step in this research process.

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Appendix A

Moore and Dutton's (1978) Tables of Techniques of Gathering Information Related To Training Needs

TABLE 1. Organization Analysis Data for Determining Training Needs

Data Source Recommended	Training Need Implications	Reference(s)
1. Organizational Goals and Objectives	Where training emphasis can and should be placed. These provide normative standards of both direction and expected impact which can highlight deviations from objectives and performance problems.	McGehee & Thayer (1961), Morano (1973), Patten (1971), Odiorne (1970), Proctor & Thornton (1961), Johnson (1967), Bass & Vaughn (1966), Goldstein (1968)
2. Manpower Inventory	Where training is needed to fill gaps caused by retirement, turnover, age, etc. This provides an important demographic data base regarding possible scope of training needs.	McGehee & Thayer, Morano, Proctor & Thornton, BNA (1962), Goldstein
3. Skills Inventory	Number of employees in each skill group, knowledge and skill levels, training time per job, etc. This provides an estimate of the magnitude of specific training needs. Useful in cost benefit analysis of training projects.	McGehee & Thayer, Johnson, Wessman (1975)
4. Organizational Climate Indices	These "quality of working life" indicators at this organization level may help focus on problems that have training components.	McGehee & Thayer, Goldstein, Helfriegel and Slocum (1974), Schneider (1975)
a. Labor-management data	All of these items related to either work participation or productivity are useful both in discrepancy analysis and in helping management set a value on the behaviors it wishes improved through training once training has been established as a relevant solution.	McGehee & Thayer
b. Grievances		McGehee & Thayer, Lawrie & Boringer (1971)
c. Turnover		McGehee & Thayer, BNA (1962), Morano
d. Absenteeism		McGehee & Thayer, Morano
e. Suggestions		McGehee & Thayer
f. Productivity		McGehee & Thayer
g. Accidents		McGehee & Thayer
h. Short-term sickness		McGehee & Thayer
i. Observation of employee behavior		McGehee & Thayer
j. Attitude surveys	Good for locating discrepancies between organizational expectations and perceived results	McGehee & Thayer, Bellman (1975)
k. Customer complaints	Valuable feedback; look especially for patterns and repeat complaints.	Lawrie & Boringer

(Note: From Moore, M. L., & Dutton, P. (1978). Training needs analysis: Review and critique. *Academy of Management Review, 3*(3), 532-545.

Table 1 Continued

Data Source Recommended	Training Need Implications	Reference(s)
5. Analysis of Efficiency Indices	Cost accounting concepts may represent ratio between actual performance and desired or standard performance.	McGehee & Thayer, BNA (1962), Goldstein, Proctor & Thornton
a. Costs of labor		McGehee & Thayer
b. Costs of materials		McGehee & Thayer
c. Quality of product		McGehee & Thayer
d. Equipment utilization		McGehee & Thayer
e. Costs of distribution		McGehee & Thayer
f. Waste		McGehee & Thayer
g. Downtime		McGehee & Thayer, Lawrie & Boringer
h. Late deliveries		McGehee & Thayer
i. Repairs		McGehee & Thayer
6. Changes in System or Sub-System	New or changed equipment may present a training problem.	Warren (1968), BNA (1969), Johnson
7. Management Requests or Management Interrogation	One of most common techniques of training needs determination.	Mahler (1952), Proctor & Thornton (1961), BNA (1962), French (1974), Warren & Kirkpatrick (1971), Pierce & Wentlod (1970), Glueck (1974), BNA (1969), Otto & Glaser (1970)
8. Exit Interviews	Often information not otherwise available can be obtained in these. Problem areas and supervisory training needs especially.	Kirkpatrick
9. MBO or Work Planning and Review Systems	Provides performance review, potential review, and long-term business objectives. Provides actual performance data on a recurring basis so that base-line measurements may be known and subsequent improvement or deterioration of performance can be identified and analyzed.	Odiorne & Humble (1970)

TABLE 2. Techniques for Determining Training Needs: Operations or Job Data

Technique for Obtaining Job Data	Training Need Implications	Reference(s)
1. Job Descriptions	Outlines the job in terms of typical duties and responsibilities but is not meant to be all-inclusive. Helps define performance discrepancies.	McGehee & Thayer (1961), Goldstein (1974), Kirkpatrick (1971), BNA (1962), Lawrie & Boringer (1971), DePhillips, et. al. (1960), Johnson (1967), Wessman (1975), BNA (1969)
2. Job Specifications or Task Analysis	List specified tasks required for each job. More specific than job descriptions. Specifications may extend to judgments of knowledge and skills required of job incumbents.	McGehee & Thayer, Kirkpatrick, DePhillips, et. al., Goldstein, Wessman, Johnson, Proctor & Thornton (1961)
3. Performance Standards	Objectives of the tasks of job and standards by which they are judged. This may include baseline data as well.	McGehee & Thayer, Goldstein, Odiorne (1970)
4. Perform the Job	Most effective way of determining specific tasks but has serious limitations the higher the level of the job in that performance requirements typically have longer gaps between performance and resulting outcomes.	McGehee & Thayer, Goldstein, Bass & Vaughn (1966)
5. Observe Job–Work Sampling		McGehee & Thayer, Goldstein, Proctor & Thornton, BNA (1969)
6. Review Literature Concerning the Job	Possibly useful in comparison analyses of job structures but far removed from either unique aspects of the job structure within any specific organization or specific performance requirements.	McGehee & Thayer, Bass & Vaughn
a. Research in other industries		Lawrie & Boringer, Glueck (1974)
b. Professional journals		Lawrie & Boringer
c. Documents		Lawrie & Boringer
d. Government sources		Lawrie & Boringer
e. PhD Theses		Lawrie & Boringer
7. Ask Questions about the Job		McGehee & Thayer, Finnegan (1974)
a. Of the job holder		
b. Of the supervisor		
c. Of higher management		Kirkpatrick, Ono & Glaser (1970)

Table 2 Continued

Technique for Obtaining Job Data	Training Need Implications	Reference(s)
8. Training Committees or Conferences	Inputs from several viewpoints can often reveal training needs or training desires.	Patten, Bass & Vaughn, Talbot & Ellis (1969), Pierce & Wenloaf (1970), BNA (1962), Finnegan, Johnson, Goldstein, Proctor & Thornton, BNA (1969)
9. Analysis of Operating Problems	Indications of task interference, environmental factors, etc.	Bass & Vaughn, Johnson, Glueck (1970), Proctor & Thornton
a. Down time reports		McGehee & Thayer, Lawrie & Boringer
b. Waste		McGehee & Thayer
c. Repairs		McGehee & Thayer
d. Late deliveries		McGehee & Thayer
e. Quality control		McGehee & Thayer
10. Card Sort	Utilized in training conferences. "How to" statements sorted by training importance.	Johnson, Patten

TABLE 3. Techniques for Determining Training Needs: Man or Individual Analysis

Technique or Data Obtained	Training Need Implications	Reference(s)
1. Performance Data or Appraisals as Indicators of "Sickness"	Include weaknesses and area of improvement as well as strong points. Easy to analyze and quantify for purposes of determining subjects and kinds of training needed. These data can be used to identify performance discrepancies.	McGehee & Thayer (1961), Patten (1971), Warren (1969), Talbot & Ellis (1969), Kirkpatrick (1971), Goldstein (1974), Prieve & Wendorf (1970), DePhillips, et. al. (1960), Renton (1969), Bass & Vaughn (1966), Lawrie & Boringer (1971), BNA (1969), Proctor & Thornton (1961), Finnegan (1970), Wessman (1975), Johnson (1967)
a. Productivity		McGehee & Thayer
b. Absenteeism or Tardiness		McGehee & Thayer
c. Accidents		McGehee & Thayer, Glueck (1974)
d. Short-term sickness		McGehee & Thayer
e. Grievances		McGehee & Thayer
f. Waste		McGehee & Thayer
g. Late deliveries		McGehee & Thayer
h. Product Quality		McGehee & Thayer
i. Downtime		McGehee & Thayer
j. Repairs		McGehee & Thayer
k. Equipment utilization		McGehee & Thayer
l. Customer complaints		Lawrie & Boringer
2. Observations--Work Sampling	More subjective technique but provides both employee behavior and results of the behavior.	McGehee & Thayer, Renton, BNA (1969), Johnson, Goldstein, Finnegan, Patten, Warren, Rose (1964), Talbot and Ellis
3. Interviews	Individual is only one who knows what he(she) believes he(she) needs to learn. Involvement in need analysis can also motivate employees to make an effort to learn.	McGehee & Thayer, Renton, Goldstein, Otto (1976), Lawrie & Boringer, BNA (1962), Talbot & Ellis, Patten, Warren, Kirkpatrick, Johnson, Proctor & Thornton, BNA (1969)
4. Questionnaires	Same approach as the interview. Easily tailored to specific characteristics of the organization. May produce bias through the necessity of pre-structure categories.	McGehee & Thayer, Bellman (1975), Bass & Vaughn, Kirkpatrick, Patten, Finnegan, Rose, BNA (1962), Talbot & Ellis, Wood (1956), Johnson, BNA (1969)

Table 3 Continued

Technique or Data Obtained	Training Need Implications	Reference(s)
5. Tests	Can be tailor-made or standardized. Care must be taken so that they measure job-related qualities.	McGehee & Thayer, Johnson, Wessman, Bass & Vaughn, Proctor & Thornton
a. Job knowledge		McGehee & Thayer, Patten, Kirkpatrick, Rose, Prieve & Wendorf
b. Skills		McGehee & Thayer, Kirkpatrick
c. Achievement		McGehee & Thayer, Rose
6. Attitude Surveys	On the individual basis, useful in determining morale, motivation or satisfaction of each employee.	McGehee & Thayer, Johnson, Kirkpatrick, Morano, Talbot & Ellis, Wessman, Prieve & Wendorf, Glueck
7. Checklists or Training Progress Charts	Up-to-date listing of each employee's skills. Indicates future training requirements for each job.	McGehee & Thayer, Proctor & Thornton, Rose, Johnson, Goldstein
8. Rating Scales	Care must be taken to insure relevant, reliable, and objective employee ratings.	McGehee & Thayer, Patten, Finnegan
9. Critical Incidents	Observed actions which are critical to the successful or unsuccessful performance of the job.	McGehee & Thayer, Johnson, Goldstein, Wessman
10. Diaries	Individual employee records details of his (her) job.	McGehee & Thayer; Talbot & Ellis, Goldstein
11. Devised Situations	Certain knowledge, skills and attitudes are demonstrated in these techniques.	McGehee & Thayer
a. Role play		McGehee & Thayer, Johnson
b. Case study		McGehee & Thayer, Johnson
c. Conference leadership training sessions		McGehee & Thayer
d. Business games		McGehee & Thayer, Johnson
e. In-baskets		Johnson
12. Diagnostic Rating	Check lists are factor analyzed to yield diagnostic ratings.	McGehee & Thayer, Wherry (1959)
13. Assessment Centers	Combination of several of the above techniques into an intensive assessment program.	Wessman
14. Coaching	Similar to interview--one-to-one.	Wessman

Table 3 Continued

Technique or Data Obtained	Training Need Implications	Reference(s)
15. MBO or Work Planning and Review Systems	Provides actual performance data on a recurring basis related to organizational (and individually or group-negotiated standards) so that base-line measurements may be known and subsequent improvements or deterioration of performance may be identified and analyzed. This performance review and potential review is keyed to larger organization goals and objectives.	Odiorne (1970), Humble (1976), Goldstein

Appendix B

Reference Notes Used In Developing the First Draft of the Performance Analysis for Training Model

This appendix contains the reference notes from the key literature sources used in developing the initial version of the Performance Analysis for Training (PAT) Model. The reference notes are summarized and presented in alphabetical order based on the authors' last names.

Bjorkquist, D. C. (1988). *Training and development needs assessment method.* Unpublished manuscript, University of Minnesota, St. Paul.

This one-page document is adapted from "Designing and Conducting a Training Needs Analysis: Putting the Horse before the Cart," by L. Olives, 1983, *Journal of Management Development, 2*(3), pp.19 to 41. The document describes the following seven-step process: (a) determine the purpose and objective of the needs assessment, (b) identify the kinds of information needed, (c) design the data-gathering approach, (d) gather data, (e) analyze and verify data, (f) separate training related needs from other needs, and (g) set training priorities.

Bormann, E. G. (1983). Symbolic convergence: Organizational communication and culture. In L. Putnam and M. Packanowsky (Eds.). *Communication and organizations: An interpretive approach* (pp. 99-122). Beverly Hills, CA: Sage.

This chapter focuses on how symbols are shared and communicated in the process of building a general consensus about the organization's reality.

Borman described how managerial communication involves enacting and sharing organization stories and gaining consensus through a process called symbolic convergence.

Symbolic convergence theory describes how individuals are able to reach a point where they can share common sentiments, emotional involvement, and commitment to symbols. The theory also focuses on how people take part in logical discussions and negotiate the meaning of the system of which they are a part.

Symbolic convergence occurs in small groups through a dynamic process of sharing group fantasies. The fantasies involve a protagonist who arouses the emotions of the listeners (e.g., humor or suspense). When members of an organization share a fantasy, they experience the same emotions, develop the same attitudes to the people in the story, and interpret an event in the same way. By sharing the fantasy, the members of the group reach symbolic convergence about their shared experience.

Borman describes two kinds of symbolic convergence, fantasy themes and fantasy types. A fantasy theme consists of dramatizing incidents or a series of incidents. The incidents either took place or will take place at a different time or place (e.g., a story about the founding member of the organization who built the prototype invention at the kitchen table). A fantasy theme is a way that people make a common experience visible and give it an emotional tone.

Once the fantasy has shared meaning for a group of people, it becomes an inside joke. The inside joke is communication in which the speakers allude to a previously shared fantasy with a word, slogan, nonverbal sign, or summary of the story. A fantasy type is a theme that recurs in the group. The stories in a fantasy type are similar, but the characters and the incidents may change slightly.

This article describes how symbols are shared and communicated to build a general consensus about the organization's reality. One way to analyze the fantasies in an organization is to identify who controls the messages. Upper management often controls some formal communications such as the messages in the mission statements and official policy statements; middle management may control some formal communications such as grievance procedures and letters to the company newspaper. Informal communication tends to be a competitive arena where special interest groups and formal organizational units try to communicate their message.

When a number of people within a subsystem have shared multiple fantasies, they may develop a vision of themselves. A rhetorical vision subsumes a number of fantasies and, therefore, provides a broader view than does a fantasy. Borman recounts how he identified the rhetorical vision of a group of students at one community college by observing that a student described a certain community college as "a high school with ash trays" (p. 114).

A rhetorical community consists of the people who share a rhetorical vision. This includes a common consciousness and inside jokes. In an organization, the rhetorical community transcends the organization's formal boundaries.

The organizational saga is a detailed narrative of the life and achievements of a person, group, or community. Borman notes that the saga provides two things: the common symbolic ties that bind participants to the organization and the symbolic aspects of the organizational culture.

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The group fantasies are rhetorical communication. The formal organization creates boundaries that keep some members from important communication about the fantasy themes. Often subgroups of management and rank and file have fantasy themes with which the other group is unfamiliar.

The study of simulated zero-history organizations has revealed that the organizations where members of the organization were committed to the whole were the organizations in which group members communicated the big picture to the other members .

Achieving organization cohesiveness requires more than commitment to the whole. Cohesiveness of individuals to the organization is achieved when communication of the big picture results in generating an organizational saga.

Borman concludes the article by stating that "an understanding of symbolic convergence theory and its application to a specific organization can explain the conflicts, lack of commitment, motivations, the general quality of life within the culture. The theory skillfully and artistically applied can also allow for anticipation of future communicative events" (p. 122).

Georgenson, D., & Del Galzo, E. (1984). Maximize the return on your training investment through needs analysis. *Training and Development Journal. 38*(3), 42-47.

The authors describe three common mistakes in conducting a needs analysis: (a) assuming that a company's needs are static and, therefore, they only have to be analyzed once; (b) implementing a training program just because management has requested it; and (c) conducting biased analyses in which training content areas are selected based on the trainer's strengths or areas of interest rather than on what is needed.

The authors note that needs analysis is important because, to be effective, training must be understood and supported by management. A needs analysis can draw management into the process by soliciting management input. In addition to soliciting management support, the best analysis (a) identifies the training priorities that help solve an organization's most critical business issues, (b) separates training from nontraining solutions, (c) identifies the factors or rewards that will support training, and (d) helps the trainer gain credibility as a professional concerned with organizational performance.

The first step in a successful needs analysis is to collect information about the organization. The trainer discovers business issues to address by examining organization goals, changes, external factors, and performance gaps. The trainer should also monitor business issues through such means as attending periodic meetings, getting monthly reports, and participating in strategic planning.

The second step is to identify potential training opportunities. After the business issues have been identified, they should be linked to potential training opportunities. For example, a business issue of increasing innovation can result in a potential training opportunity of improving managers' ability to delegate and allow freedom in decision making.

The third step is to conduct a performance audit. The potential opportunities for training should be investigated to determine if training will help. Training problems should be separated from nontraining problems. Also, the causes of performance problems should be verified by checking with more than one source. The authors note that a single source could be biased.

The next steps in needs analysis involve selecting and testing the content areas and determining the required knowledge, skills, and attitudes. The final step involves verifying the knowledge, skills, and attitudes against the business issues.

Gilbert, T. F. (1978). ***Human competence: Engineering worthy performance.*** **New York: McGraw-Hill.**

This book is referenced frequently in the needs assessment literature. One of Gilbert's premises is that worthy human performance can and should be engineered to serve the best interests of the institution in which the behavior occurs. Worthy performance is defined by a ratio of the value ,or worth, of an accomplishment to the cost of the behavior. An accomplishment is measured by multiplying the quality of what is produced times the quantity that is produced and dividing by the cost. With this formula, worthy performance is measured by accomplishment rather than by behavior.

Gilbert also described a performance audit that can be used to analyze performance. Performance measures are based on accomplishments, so the first step in the process is to identify the accomplishments. The second step is to identify requirements such as the demands of the system. The third step is to identify exemplary performance. Exemplary performance is the performance in the accomplishment area that has the most sustained level of worthy performance. The fourth step is to measure exemplary performance and the fifth step is to measure typical performance. The sixth step is to compute the performance improvement potential (PIP). The PIP is the ratio of the exemplary performance to the typical performance. The difference, as measured by the

PIP, is called either a deficiency or a potential. In general, the larger the PIP, the greater the opportunity to improve performance. The seventh step is to translate the PIP into stakes, or measures of economic potential. Decisions about changing performance can be made by comparing the PIP.

To measure performance, Gilbert suggests that the analyst begin with the most general measures first and then proceed to the specific measures. For example, he suggests measuring the institution's accomplishments, then the job accomplishments, and then the task accomplishments. He notes that beginning with specific measures will only cause confusion and wasted time. When measuring performance, it is important to classify the conditions of performance accurately, but precision is not required in quantifying the performance. According to Gilbert, precise measures of performance are not required because the goal of the exercise is to identify opportunities to improve performance. Differences are seldom so small that they need to be confirmed statistically.

Organization decision makers seldom consider opportunity in terms of the difference between exemplary and typical performance, so this information usually must be gathered. After the PIP is measured, the differences in work behaviors that account for the PIP are examined. Gilbert says that the first step in troubleshooting performance is to determine whether the individual has sufficient and reliable data to guide the performance and to give feedback on how well the he or she has performed. The second step is to determine whether the individual has the tools and materials needed to do the work. The third step is to identify how the incentives can be improved and how they can be made more contingent upon good performance. The fourth step is to examine whether lack of knowledge is a problem and to determine whether training is the appropriate solution. The fifth step is to determine whether people have the capacity to perform well. The sixth, and final, step is to determine whether people have the appropriate motives and incentives.

Glidewell J. C. (Ed.) (1986). *Corporate Cultures: Research implications for human resource development.* Alexandria, VA: American Society for Training and Development.

This book contains papers that came out of the American Society for Training and Development Invitational Research Seminar (AIRS). Experts and practitioners discussed implications of corporate cultures for research and application from the perspectives of organizational effectiveness and human resource development.

Three chapters of the book raised practical issues specifically related to this research effort: Michael A. Berger's "Research on Corporate Culture: The Agony and the Ecstasy;" Andrew Dougherty and Clint Wallington's "Researching Corporate Cultures: Some Observations on the Value of Research;" and Oron South's "Culture as a Target of Change."

Berger, in his chapter, describes the relationship between the human resource development (HRD) professionals and the researcher. He notes that both can gain from such a relationship. Berger observes that outsiders to the organization do not have access to the culture. He states that, "as outsiders, they were not involved in the creation of the organization's culture and they often cannot participate in its most private management efforts. They are blocked" (pp. 54-55). HRD professionals inside the organization can provide a gatekeeper role in helping the researcher gain access. The researcher can help the HRD professional see the values, assumptions, and norms that will affect HRD plans. The HRD professional can also act as a sounding board and can help the researcher interpret the cultural themes.

Dougherty and Wallington, as part of their chapter, identify research questions relative to corporate cultures. One such question focuses on the relationship between the consultant's style and the consultant's success with client organization's that have various characteristics. The authors, in discussing the consultant's style, note that it seems likely that such a style would come out of the individual's learning or teaching style. They also ask under what set of circumstances consultants should be ready to alter their style to fit the needs of client organizations.

Dougherty and Wallington also ask questions about how the consultant's use of self in the consulting process (e.g. openness about feelings, confidence in the solution, intervention versus. nonintervention, etc.) is related to the success of the consultancy as it is perceived by the client organization and by the consultant.

In his chapter, South has a section titled "Who Identifies Gaps?" He says that in perceiving sociocultural gaps, one presumes a definite value position:

> standing 'outside' an organization or society to view culture as a whole implies that outside is in some respects a different place and a different culture. This difference enable [sic] the observer to see what others may miss or may not be conscious of. Two questions (at least) arise: (1) has the outsider got it all together—what is the source of wisdom that gives force to the gaps identified, (2) what is the philosophy of the culture of the outsider? . . . My guess is that many who have been involved in OD-type consulting

> will assume that the process focus and culture from whence they come is sufficient to qualify them to lead explorations. I do not think so. (p. 76)

Goldstein, I. L. (1986). *Training in organizations: Needs assessment, development and evaluation* (2nd ed.). Monterey, CA:Brooks/Cole.

Goldstein identifies needs assessment as the first phase of a systematic process to develop training. The process consists of three interacting analyses: (a) organizational analysis; (b) task and knowledge, skill and ability analysis; and (c) person analysis.

Organization analysis focuses on the systemwide components of the organization that may affect a training program. It begins with an analysis of the organization's short- and long-term goals. Organization analysis includes an examination of organization resources, climate for training, and internal and external constraints in the environment.

According to Goldstein, the climate for training includes the organization's reward system. The rewards that managers receive for supporting the skills learned in training will impact how training is applied on the job. Goldstein also emphasizes the importance of examining organization values. He says that if training does not reflect the values of the workplace, it won't get used on the job.

Internal and external constraints in the environment include the organization's philosophies, emphasis, and objectives. Goldstein says that these must be identified in the needs-assessment phase if they are to be considered in the design of training. The organization's external constraints include the legal, social, economic, and political factors that can affect the organization. An internal constraint to consider in organization analysis is the supporting systems such as human factors engineering, selection, and work procedures.

Goldstein notes that often the goals of an organization are not explicit. In addition, there are often conflicts among people about the work activities to be performed and the goals to be achieved. Such situations may result in trainees' working hard to gain knowledge, skills, and abilities that they cannot use on the job. Training programs implemented in such situations may fail because of the constraints of the organizational system.

Goldstein says that the process of conducting an organization analysis may be an interactive give-and-take relationship between the training department and the working organization to work out the necessary goals, relationships, and conflicts. Although he does not describe this process, he states that organization analysis "often requires that upper-level management examine their own expectations concerning their training programs" (p.17). Goldstein also states that the actual components of an organizational analysis are dependent upon the type of program being instituted and the character of the organization.

The second part of the needs assessment program consists of task and knowledge, skill, and ability analysis. This analysis involves study of the job to be performed by trainees after they have completed training. The analysis involves completing a job description and a task specification. The job description is a narrative that specifies the individual's duties and the conditions under which the job is performed. The task specification denotes all of the tasks required to do the job. Goldstein points out that sometimes the various groups do not agree on the tasks required for performing the job and that these differences must be resolved before training is designed.

The task requirements must then be translated into the knowledge, skills, and abilities needed to perform the tasks. Examining the knowledge, skills, and abilities can be useful in determining the learning environment and instructional media. Examining the knowledge, skills, and abilities can be used to make training decisions such as which skills are critical to the job, which skills should be prerequisite to the training, and which should be learned in training instead of on the job.

The third analysis described by Goldstein is person analysis. This analysis centers on how well employees perform the tasks that make up the job. Goldstein in this section notes that "these analyses and the decisions that come from them are complex, and they interact with the information obtained throughout the entire needs assessment program" (p. 47).

At this stage, measures of criteria are developed to serve as indicators of performance. Goldstein devotes an entire chapter to criterion choices. In addition to discussing types, levels, and dimensions of criteria, he discusses the evaluation of criteria in terms of relevancy, deficiency, reliability, and contamination. Goldstein also describes sources of job information and various methods used to collect information. Sources of job information include previous analyses of tasks (e.g., the *Dictionary of Occupational Titles)*, documentary materials on the tasks, and the analysis performed on the organization.

Goldstein lists the nine methods of gathering data that were developed by S. V. Steadham:

1. Observation.
2. Questionnaires.
3. Key consultation.
4. Print media.
5. Interview.
6. Group discussion.
7. Tests.
8. Records and reports.
9. Work samples.

Goldstein noted that the characteristics of the data-gathering method can influence the information that is gathered. For example, he noted that an interview is dependent on the interviewer's skill and biases. Goldstein describes several steps that can be taken to avoid bias in the data collection. These include designing the needs assessment to avoid difficulties where possible, using more than one data collection method, using more than one interviewer, and using respondents who have relevant information about the job and who represent cross sections of the organization. Goldstein notes that not all needs assessment phases result in training solutions. When there is a training solution, however, person analysis provides the information needed to specify the training objectives.

Harless, J. H. (1975). *An ounce of analysis (is worth a pound of objectives).* Newnan, GA: Guild V.

Harless is frequently cited in the needs assessment literature. His book *An Ounce of Analysis (Is Worth a Pound of Objectives)* is a self-instruction text. Front-end analysis, a term coined by Harless, is seen as a phase of a larger instructional system. Harless defines front-end analysis as "all the smart things a manager does before addressing a solution to a human performance problem" (p. v). He used the term *front-end analysis* to describe the procedure for determining the symptoms and indicators showing that a problem exists, what the performance problem is, and the relative value of solving the performance problem. A problem is defined as "the difference between the actual situation and the model situation"(p. 22). Harless terms this difference a *deficiency*. The steps of the front-end analysis process are as follows:

1. Narrow the problem area.
2. Describe the problem.
3. Hypothesize causes (e.g., lack of skills/knowledge, environmental deficiency, motivational-incentive deficiency).
4. Test each hypothesis.
5. Determine solution alternatives.
6. Select the best alternative.

The analysis process identified by Harless is used to get at the root of the problem. The process begins with recognizing that there is a problem. In the second step, performance is defined and described. Describing the problem focuses on defining the mastery performance and the actual performance, comparing the two, and describing lkthe deviation. The third step focuses on hypothesizing causes for the performance problems. Harless identifies three categories of causes for performance problems: skill/knowledge deficiencies, environmental deficiencies, and motivational-incentive deficiencies. Only skill/knowledge deficiencies can be satisfactorily addressed with training solutions. The other deficiencies require nontraining solutions.

For each problem, the manager or trainer first hypothesizes a skill/knowledge deficiency, then an environmental deficiency, and then a motivationa-/incentive deficiency. Evidence is then gathered for and against each hypothesis, alternatives are generated and one alternative is selected.

Mager, R. F., & Pipe, P. (1984). *Analyzing performance problems, or, you really oughta wanna* (2nd ed.). Belmont, CA: David S. Lake.

Mager and Pipe's book contains a model of needs assessment that begins with identifying the discrepancy between actual and desired performance. Mager and Pipe use the word *discrepancy* because it does not contain the value judgment implied by the word *deficiency*. The nature of the discrepancy is determined by asking questions such as, "Why do I say something is not the way it ought to be? Why do I say there is a 'training' problem? What event causes me to say that changes must be made?" (p. 10). After a discrepancy is identified, the importance of its consequences for the company is determined.

The next steps in the Mager and Pipe model focus on determining the cause of the discrepancy. If the problem is a skill deficiency and if the individuals could not do the job if their lives depended on it, then additional questions are asked to determine why the deficiency exists and to shape the solution to the problem. The additional questions focus on whether the skill ever existed, whether the skill is often used, whether there is a simpler solution than training, and whether the individuals have the potential to benefit from the training. Individual potential is ascertained based on whether the individual can learn the job and whether the individual has what it takes to do the job. If the problem is not caused by a skill deficiency, training is not the solution. Determinations then are made about the consequences of performance and the obstacles that impede performance.

The next steps in the model involve identifying potential solutions; verifying that the solutions address the issues revealed by the analysis; evaluating potential solutions in terms of feasibility, practicality, and cost; and selecting the solution or combination of solutions that will add the most value. Mager and Pipe describe a solution as feasible when "it will be acceptable to the people affected and not harmful (politically or otherwise) to you or to others" (p. 127).

McGehee, W., & Thayer, P. W. (1961). *Training in business and industry*. New York: Wiley.

In 1961, McGehee and Thayer wrote one of the most influential books on training needs assessment, *Training in Business and Industry*. In this seminal book, the authors present a systematic, integrated model that has three interrelated phases. For each phase, McGehee and Thayer identify the kinds of data that should be used in the analysis and discuss issues of validity and reliability in gathering the data. The three phases of the McGehee and Thayer model are (a) organization analysis, (b) operations analysis, and (c) man analysis.

Organization analysis focuses on determining where within the organization the training emphasis can and should be placed. McGehee and Thayer's perspective is that training can affect the organization and the organization can affect training. Organization analysis centers on the entire organization. It includes an examination of such things as the organization's objectives and resources and how the organization allocates its resources.

Organization analysis consists of the following steps:

1. A statement of the organization's objectives.
2. Analysis of human resources.
3. Analysis of efficiency indices.
4. Analysis of organizational climate.

The results of Steps 2, 3, and 4 are compared to the objectives of the organization, which were identified in Step 1. These comparisons point to the specific areas where job and man analysis are needed.

The authors note that the first step, a statement of the organization's objectives, is important because training operates within complex social organizations that have objectives. Organizational objectives and measurement of these objectives are necessary if the organization is "to know whether it is alive, dead, or near the point of death" (p. 30). Information for this step of the analysis is gathered by obtaining statements of objectives for the company and for components of the company (i.e., divisions, departments, units).

The second step, analysis of human resources in relation to manpower needs, provides information about whether training is needed to improve the performance of those who currently hold the job or to prepare replacements. Information for this step of the analysis is gathered through a manpower audit. The audit contains information such as the number of employees in the job classification, the age of each employee in the job classification, the level of knowledge and skill required by the job of each employee, and the training time required by a novice. The authors point out that "this information can be secured easily if adequate personnel records are kept" (p. 34).

The third step, analysis of efficiency indices, provides information about the functions of the organization. Efficiency indices consist of ratios between actual performance and the standard or ideal performance. For example, many organizations measure the costs of labor and materials needed to produce goods and services, the quality of the product, machinery and equipment usage, and distribution costs. These measures can be compared to the amount that is produced. Reviews of these indices provide information about the location of imbalances within the organization. They do not, however, provide information about whether lack of training is contributing to the problem.

The fourth step, analysis of the organization climate, is important because training is directed toward modifying the behavior of individuals to meet organization objectives and, thereby, increase productivity. But, each individual has his or her own objectives and attitudes, which serve as the basis for behavior. The objectives and attitudes of individuals within an organization may or may not be congruent with the objectives of the organization. An organizational climate analysis indicates whether training can produce changes in employee behavior that will contribute to organizational goals. It can also indicate whether the organizational climate will permit changes in behavior as the result of training and which of these changes in behavior should be accomplished through training.

The data for the organizational climate analysis can be gathered through the following methods: observations, interviews, surveys, and review of organization records. Some of these methods directly measure performance, and some indirectly measures performance. McGehee and Thayer indicate that combining direct and indirect measures is most effective. They also note that the review of organization records includes indices such as labor-management conflict, absenteeism rates, employee suggestions, and productivity measures.

McGehee and Thayer discuss the validity and reliability of the measures used in organization analysis. They note that quantitative measures are important for supporting management decisions and that although some of the measures may be simple, others may be complex. They present, as an example of a complex measure, employees who are considered efficient based on their ratio of input to output. Such a ratio is an invalid measure of employee efficiency if factors beyond the employees' control affect the number of units that are produced. In addition, observations can be biased by the frames of reference of the observer. Observations can also be biased by the effect that the presence of an observer has on the behavior of individuals. McGehee and Thayer note that another disadvantage of observations is that feelings and attitudes about employees toward their work must be inferred.

Verbal statements from employees can provide information about how employees feel and the intensity of their feelings. Issues of validity for verbal statements include the truthfulness of the statements and the ability of the employees to communicate their feelings. In conducting an organization analysis, the authors suggest that trainers first determine whether the measures actually measure what they claim to measure and then determine whether the measures represent a serious situation that warrants a training solution.

The reliability of the measures can be a problem if there are no independent measures of the same phenomena. McGehee and Thayer note that spurious reliability could result if one person counted the data and others copied that count.

Operations analysis, in the McGehee and Thayer model, consists of determining the contents of the training in terms of what an employee must do to effectively perform a task, a job, or an assignment. This analysis focuses on the job that must be done, regardless of the individual who has the position. The job analysis should result in information about the standards of performance for the task or job; identification of the tasks that make up the job or the assignment; information about how each task is to be performed if standards of performance are to be met; and the knowledge, skills, and attitudes that are needed to perform each task in the required manner. Information for the job analysis is gathered through a combination of the following methods: reviewing the literature; performing the job; observing the job; and asking questions about the job. The last method, asking questions about the job, may include use of the critical incident technique and research into consumer opinions.

McGehee and Thayer discuss issues of validity and reliability in collecting information for this phase of analysis. They raise the same concerns about the observation and interview methods that they raised for the organization phase of analysis. They also discuss an experimental research study by Rupe (cited in McGehee & Thayer, 1961) on the relative usefulness of various techniques for asking questions about 16 jobs that were representative of Air Force career fields. The methods used in the study were questionnaire-survey, group interview, individual interview, observation interview, and technical conference. One of Rupe's important findings was that in the military situation, the analysts differed more in their effectiveness than did the methods used.

McGehee and Thayer also discuss the methods of literature review and performing the job. They note that there is no research evidence that "either a literature review or performing the job results in increased reliability and validity of the analysis" (p. 72).

In addition, McGehee and Thayer discuss the validity of the critical incident technique. They point out that using critical incidents to analyze jobs does not automatically solve the problem of validity. They add that critical-incident job analysis must be validated against some measures of criticalness other than the judgment of the observers who supply the incidents.

According to McGehee and Thayer, additional research is needed on the methods used to analyze jobs in order to know how much each method can be trusted.

The third phase of analysis in the McGehee and Thayer model is man analysis. It consists of two steps:

1. Summarizing how well an individual is performing the tasks that make up his or her current job.

2. Diagnosing the qualities in the individual's behavior that lead to the current performance level and determining the extent to which the behavior must be changed to meet the requirements of the job. The analysis may also include determining the new skills, knowledge, and attitudes that are required if an individual is to perform a new or different job.

The methods of gathering information for a man analysis can be classified into the following categories:

1. Objective records of job performance.
2. Devised situational measures.
3. Observational measures.

Objective records of job performance measure the amount that is produced in relation to the performance standards for the job. Devised situational measures are used to assess the performance of individuals based on their performance in a structured situation to which they have been exposed. Examples of devised situational measures include achievement tests for either job knowledge or job performance, case studies, and business games. Observational measures are based on direct observation of the individual as he or she performs the job. Tools used for observing individual performance include performance records, checklists, and rating techniques. Interviews, questionnaires, and reviews of employee diaries are also used in determining the training needs of individuals.

McGehee and Thayer discuss the validity and reliability of these techniques. They note that man analysis is the most difficult phase of determining training needs because human behavior is complex and because the individual's performance is often contaminated by factors beyond his or her control. In addition, one person's job performance is often measured by another person. When the person who is measuring is biased, the validity of the results can be challenged. This problem can be compounded because those who do the measuring seldom have the training or the skill needed for this task. Also, techniques of measurement in this area are not precise.

There can also be problems with objective measures of performance. They may be inaccurate, unreliable, or biased. Examples of invalid objective measures include instances when the objective measures of productivity change because of a variation in the quality of one of the raw materials and instances when objective measures of sales change as a result of economic conditions. Also, objective measures may be hard to obtain for some jobs because of the time span involved. For example, managerial performance cannot be measured on a weekly basis.

The three-faceted needs assessment model of McGehee and Thayer was designed to result in systematic, objective determination of needs. The phases of the model are interrelated, as are the data-gathering methods. For example, a review of organization records of safety incidents could provide insight into the organizational climate as well as how departments and individuals are performing in this area.

Rossett, A. (1987). *Training needs assessment.* Englewood Cliffs, NJ: Educational Technology.

Rossett's book focuses on training needs assessments (TNA) that are initiated because of performance problems, new systems and technologies, and automatic or habitual training. She clearly describes the relationship between needs assessment and the other steps in the instructional system development process.

In Rossett's model, the purposes of the training needs assessments are to seek information about optimal performance or knowledge, actual or current performance or knowledge, feelings of trainees and significant others, causes of the problem from many perspectives, and solutions to the problem from many perspectives. Rossett uses the following formula: optimal (performance) minus actual (performance) equals performance discrepancies, or needs.

Analysis techniques and tools for achieving the purposes of the TNA are also described. The techniques include extant data analysis, needs assessment, and subject matter analysis. Extant data are the results of employee performance. Needs assessment is the way that opinions, actuals (current performance), feelings, causes, and solutions are sought from a variety of sources. Subject matter analysis is a technique for finding and representing bodies of knowledge and skill.

Rossett describes a process of planning a TNA that begins with an assessment of the purpose of the training needs assessment and the determination of such things as who wants the problem solved and who does not. Planning also includes considering such things as the amount of available time and money and the politics of the situation. The tools of a training needs assessment are interviews, observations, groups, and surveys. Rossett provides practical instructions for using the tools.

Rossett also discusses the importance of communicating the results of the needs assessment to those who need to know. She notes that the communication must match the expectations of the receivers. She also lists the kind of results that can be presented. These include information about optimal performance or knowledge; information about actual or current performance or knowledge; comparisons of optimals and actuals; sources of feelings about the problem or innovation; causes of the problem; solutions to the problem; areas of disagreement surrounding the issue; reasons for supporting the the project;

solicitation of opinions and information from other sources; historical records of the effort, its sources and findings; and recommendations for action(s).

Swanson, R. A., & Gradous, D. (1986). *Performance at work: A systematic program for analyzing work behavior.* New York: Wiley.

This book describes a systematic program for analyzing work behaviors on the job. It contains a process for conducting analyses of job behavior as well as methods for conducting general and specific work behavior analysis.

The book describes four steps to effective solutions: (a) organization needs assessment, (b) general work analysis, (c) specific work behavior analysis, and (d) the solution.

Swanson and Gradous describe an organization as "having many identifiable work performance problems" (p. 239). They also say that organization analysis should precede work behavior analysis. Swanson and Gradous note that their book does not focus on organization needs assessment, and they refer the reader to other sources for this information.

General work behavior is analyzed using two methods, job description and task inventory. These are not the same as the personnel records to which other writers refer: instead, they are detailed documents written specifically for training.

Swanson and Gradous describe three specific work behavior analysis methods. Procedure analysis is used to specify the behaviors for accomplishing observable job tasks; process and troubleshooting is used to specify the work behaviors required to keep systems running; and subject matter analysis is used with nonobservable knowledge work. The authors provide guidelines and forms for using their analysis methods.

In discussing solutions, Swanson and Gradous note that "good solutions make heroes; good analyses make good solutions" (p.236). They make the point that the solutions result from first identifying the organization need, then conducting a general work analysis, and then conducting a specific work analysis. The authors, however, do not describe the process by which the completed analyses are translated into solutions.

But Swanson and Gradous do discuss how the analysis methods can be used in organizations. They provide a table for choosing the appropriate analysis for the need. The authors also note that because conducting good analysis is expensive and time-consuming, excessive or inappropriate work-behavior analyses should be avoided.

Swanson, R. A., & Gradous, D. (1988). *Forecasting financial benefits of human resource development.* San Francisco: Jossey-Bass.

This book provides a method that practitioners can used to predict the financial benefits that human resource development (HRD) options have on an organization's bottomline. The method, forecasting the financial benefits (FFB), can be used to compare HRD program options, to compare an HRD option with the option of doing nothing, or to compare development and delivery methods.

To use the FFB method, the practitioner identifies potential HRD options and then determines the financial benefit of each option by subtracting the costs of that option from the performance value that is expected to result from it. The practitioner compares the expected benefits of the various options to determine the option that offers the greatest financial benefit.

The book provides worksheets for calculating the performance value, the costs, and the benefits of HRD options. The book also contains suggestions for writing proposals and presenting them to management. Computer-aided software designed to be used in conjunction with the book is also available. The software allows the practitioner to enter data on computerized worksheets and selectively print reports. All calculations are performed automatically.

Watson, C. E. (1979). *Management development through training*. Reading, MA: Addison-Wesley.

This book contains a chapter on identifying needs and formulating training objectives. According to Watson, needs assessment is important because training for the sake of training is unjustified and because resources expended in training can be justified only when the economic and social benefits exceed the resources spent.

Watson's conceptual framework for identifying management training needs has six steps:

1. Study the culture and factors external to the job held by the persons identified for training to determine such things as the principal characteristics of the firm and industry, the norms of the training population, how the cultural values and practices are consistent with management concepts, contingency principles, the characteristics of people who find the culture comfortable, and the knowledge and attitudes that members of the organization should hold to function effectively. This type of study provides information such as the size of

the firm and industry, the markets that are served, and the availability of raw materials.

2. Assess the positions held by the individuals identified for training to determine the knowledge, skills, and attitudes that they need in order to perform their jobs successfully.

3. Forecast the changes in the demands of the job that are likely to occur and identify the new challenges and demands that will be faced by individuals.

4. Determine the priorities for the knowledge, skills, and attitudes that were identified in the first three steps.

5. Conduct a study and assessment of those who are expected to receive training to determine their managerial behaviors, their levels of knowledge in the areas defined, and whether the prospective trainees have attitudes, values, and beliefs that are contrary to or supportive of the knowledge and skills that would be presented in the training.

6. Identify the differences between the desired and the actual levels of knowledge, skills, and attitudes and rank the deficiencies in order of importance.

Watson also has three suggestions for collecting data: (a) collect the optimal amount of data rather than all possible data, (b) ensure that the data collected are accurate and reliable, and (3) collect data in a way that does not make those who support or receive training hostile. Watson identifies four causes of inaccurate or unreliable data:

1. Inexperienced data gatherers, who cannot separate the important from the unimportant.

2. Biased data gatherers, who are sensitive to only certain kinds of information.

3. Data collection from nonrepresentative or limited sources.

4. Poorly designed data-gathering instruments.

Watson also identifies six ways in which the needs assessment creates negative attitudes toward training:

1. Those conducting the study project have an attitude that they will save the organization by teaching the poor souls how to manage.

2. The needs assessment uses the approach of "finding problems and correcting them." People in the organization are uncomfortable with revealing their "problems" openly so they can be helped.

3. The needs assessment can be too time consuming for managers whose important business is business, not training.

4. Management development specialists who believe that there is one best way to manage and who use the needs assessment to identify how managers are deviating from their way so that this behavior can be corrected. These specialists are often labeled as impractical or unrealistic.

5. Some people are uncomfortable with needs assessment measures that seem to analyze their inner feelings, such as attitude surveys and management-style instruments.

6. Members of organizations are aware of the expectations of upper management. Needs assessments that do not have the support of upper management may result in apathy and minimal cooperation.

Watson's approach to needs assessment emphasizes attitudes, values, and beliefs as well as behaviors and performance.

Zemke, R., & Kramlinger, T. (1982). *Figuring things out: A trainer's guide to needs and task analysis.* Reading, MA: Addison-Wesley.

Zemke and Kramlinger describe the theme of their book as, "training and HRD people get hired to prevent and/or solve human performance problems within an organization; the core of our craft is the art/science of finding the right problems and understanding them fully" (p. 15). In conducting a needs assessment, Zemke and Kramlinger start the study as high in the organization as possible and work their way down.

Their approach to operationalizing this tactic is to use the three levels of needs analysis: organization, operations, and individual. Other tactics that they use in conducting a needs assessment include the following: always work from a model of human performance, always know whom you are studying, never use just one information-gathering technique, let line managers make the critical decisions, and remember to keep it simple and sweet. Zemke and Kramlinger's process begins by identifying and determining priorities for the discrepancies between corporate performance and goals. They engage management in discussions to determine "where it hurts" and "how much it hurts."

Zemke and Kramlinger also make the point that in some situations "management opinion, government edict, or organizational politics has mandated that training is the answer, never mind the question" (p. 218). They say that in these situations no amount of excellent needs assessment work will "get you points for raining on the wrong person's parade" (p. 218).

Zemke and Kramlinger claim that there are usually a mixture of causes for any performance problem and that there is a difference between performance and behavior.

Zemke and Kramlinger provide descriptions of techniques for determining, at the organization level, whether a performance problem exists. These techniques include performance records, customer studies, focus groups and interviews, telephone interviews, questionnaires, and management mandates.

Zemke and Kramlinger also provide techniques at the operations level. They note that the techniques at the operations level should be appropriate for the job being studied, the culture of the organization, and the nature of the problem. Techniques that may be appropriate at this phase include focus groups, comparison of high- and low-performance groups, behavioral frequency studies, attitude skill studies, and one-to-one interviews.

At the individual level, the techniques that Zemke and Kramlinger believe to be important are stimulus-response tables, algorithms, critical incidents, and other information provided by the subject matter expert. The criteria for determining which technique to use include whether the task is observable, the cost, importance of employee buy-in, the amount of time available, whether the task is repetitive, whether or not the task exists, the degree of difference between people's opinions, and how well the analyst knows the content of the task. The authors provide four tables and a flowchart to show the relationships between the numerous techniques and the various criteria.

Zemke and Kramlinger also discuss the importance of reporting the needs assessment to management. In fact, they say that this is the most important part of needs assessment. Their guiding principle is "the quality of a results presentation is more important than the quality of study that produced the results" (p. 245). They present ten guidelines to consider when attempting to communicate and sell results to management: (a) define the purpose first, (b) know thy audience, (c) communicate as you go, (d) tailor the media style time mix for the audience, (e) pilot test the presentation, (f) deliver bad news first, (g) leave nothing to chance, (h) expect to be rejected, (i) keep the ball in managements' court, and (j) evaluate.

Appendix C

First Draft of the Performance Analysis For Training (PAT) Model

Performance Analysis for Training (PAT) Model

Based on a review of the training needs assessment literature and the literature on organizations as systemic, cultural, political, and rhetorical entities, three elements have been identified that affect training needs: organization characteristics, decision maker(s) characteristics, and analyst characteristics. See figure 1.

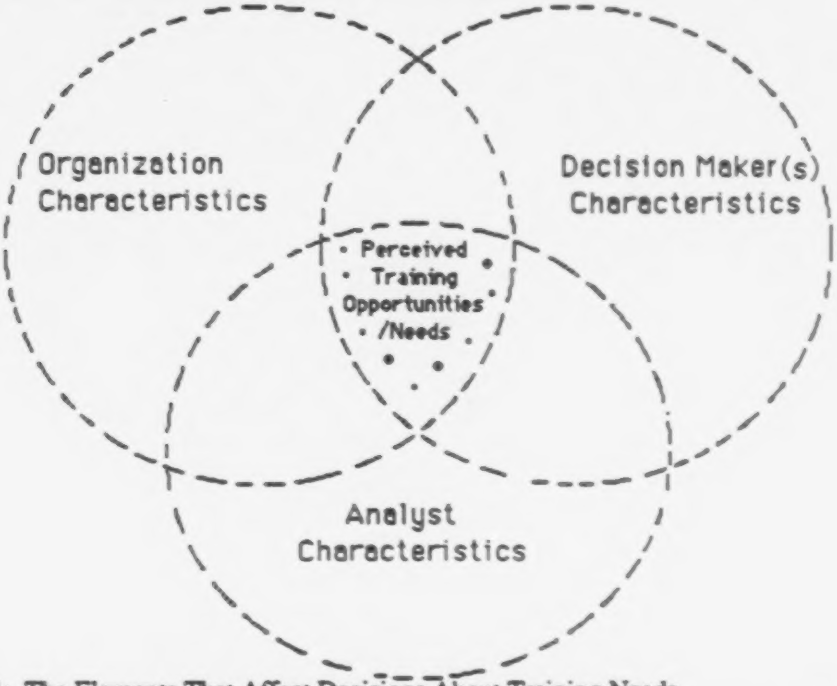

Organization Characteristics
Decision Maker(s) Characteristics
Perceived Training Opportunities /Needs
Analyst Characteristics

Figure 1: The Elements That Affect Decisions About Training Needs

Organization characteristics are the distinguishing traits, features, and qualities of an organization that affect the definition and the determination of training opportunities/needs. These include the systemic, cultural, political and rhetorical characteristics. A number of considerations identified in the literature fit in this element. They include the internal and external environment (Watson,1979), the politics surrounding the situations (Rossett, 1987), resources (Goldstein,1986; Rossett,1987), and other system-wide components of an organization that may affect the training program (Goldstein, 1986).

Decision maker(s)' characteristics include the distinguishing traits, features, and qualities of those who make determinations or judgments about training programs. A characteristic identified in the literature that fits this element is the expectations that decision makers have about training programs (Goldstein,1986; Kauffman & Stone, 1983). Rossett (1987) also discusses the importance of identifying who wants the problem solved and who does not want the problem solved.

Analyst characteristics are the distinguishing traits, features, and qualities of the individual who manages the needs assessment process and project. Characteristics identified in the literature include ability and biases toward behavior or cognitive models (Goldstein, 1986; Zemke, 1982).

The shaded area where the circles overlap is the area of commonality among the decision maker(s), the analyst, and the organization. It is through the interaction of the three elements in this shaded area that training opportunities/needs are perceived, negotiated, and prioritized.

The PAT Model consists of three phases. The first phase focuses on analysis of organizational opportunities/needs for training. It includes gathering and synthesizing information about the organization's context and its culture. Context includes such things as the descriptions of the products, description of the industry, the organization charts, the financial statements, and the strategic goals and mission. Culture includes such things as the reward system, the kind of leadership, norms, and values. The model's second phase focuses on analysis of the work and model's third phase focuses on the knowledge and skills needed by the individuals who perform the work.

One assumption of the model is that the analyst is neither the decision maker nor the designer and developer of the training, and another assumption is that the performance need to be addressed by training has not been identified.

The specific phases and steps of the model are identified on the next page. Worksheets have also been developed that will be used to guide the implementation of the model within an organization.

Phases and Steps of the Performance Analysis for Training (PAT) Model

PHASE 1: Organization Analysis

Determine where in the organization the training emphasis should be placed

1. Identify "perceived opportunities"
2. Determine the purpose and the parameters of the analysis
3. Gather information about potential training opportunities/needs
4. Gather anecdotal information
5. Analyze information
6. Report the findings to decision maker (s)
7. Decision maker(s) determine training opportunity

PHASE 2: Work behavior Analysis

Identify and document the specific behaviors needed to accomplish the work

1. Identify the work to be analyzed.
2. Construct a work behavior analysis plan
3. Conduct the work behavior analysis
4. Gather anecdotal information

PHASE 3 Analysis of Individual Capabilities

Determine which employees need training and the kind of training that they need.

1. Identify characteristics and capabilities of the group of trainees
2. Gather anectodal information
3. Analyze information
4. Report findings to the decision maker(s) and to those who need to know

Performance Analysis for Training (PAT) Worksheets

Phase 1 Analysis of Organization

Step 1 Identify "perceived opportunities"

List the perceived opportunities and identify the individual(s) who view it as important. Then determine which of the perceived needs are related to the organization's bottom-line and how are they related.

	perceived opportunities	perceived by
1		
2		
3		
4		
5		
6		

Which of the perceived opportunities are related to the organization's bottom-line?

How are the perceived opportunities related to the bottom-line ______________________

Step 2 Determine the purposes and the parameters of the analysis.

Step 2a Use the following chart to identify the salient characteristics of the decision maker, the analyst, and the organization and to record summary notes

yes	no	characteristics	summary notes
		Organization climate for training	
		reward structure	
		amount of consensus/conflict within the organization	
		the organization's internal and external environment organization goals	
		organization philosophy, emphasis, and objectives	
		legal, social, economic and political factors	
		values promoted by the organization	
		type of program being instituted	
		political factors surrounding the situation	
		supporting systems such as selection, human factors engineering and work procedures	
		other	
		Analyst internal/external consultant	
		biases in gathering information	
		skill level	
		type of power	
		style and experience of the analyst	
		other	
		Decision maker(s) expectations of the decision makers	
		amount of support for training	
		amount of consensus among decision makers	
		other	

Step 2b Using the information from step 1 and step 2a, determine the purpose and parameters of the performance for training analysis. Specify the purpose of assessment, kinds of information to be gathered, the resources available to conduct the analysis, the boundaries of the needs assessment, the kind of analysis, the format of the report, the recipient(s) of the report, and the criteria that will be used to evaluate the analysis process, and the product.

Do the decision maker(s) and the analyst agree about the purpose and parameters of the analysis? yes? no?

Is the agreement appropriate based on the organization's salient characteristics yes? no?

Step 3 Gather information about potential training opportunities/needs

The following checksheet contains a list of possible actions that can be taken during this step. Indicate the actions that are taken and make summary notes about the results.

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		The process begins at the most general level and proceeded to the specific.	
		Multiple sources and information gathering methods are used.	
		Both quantitative and qualitative information are gathered	
		Performance expectations are examined.	
		Actual performance is examined.	
		Information is gathered about possible causes and potential solutions.	
		Information is gathered about potential trainees.	
		Those who support and those who do not support the training opportunities/ needs are identified.	
		The purpose and parameters of the analysis are renegotiated if necessary.	

Step 4 Gather ancedotal information

Gather and record ancedotes, stories, and vocabulary that can be used in the instruction or that can be used to justify instruction. Record the sources and the context.

Step 5 Analyze information

The following checksheet contains a list of possible actions that can be taken during this step. Indicate the actions that are taken and make summary notes about the results.

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		Training and non-training issues are identified.	
		Causes of performance are determined.	
		Data analysis is verified with those who provided the data input	
		Determine solution alternatives	
		.Potential opportunities are prioritized	
		The financial benefits of selected options are forecast.	
		The purpose and parameters of the analysis are renegotiated if necessary.	

Step 6 Report the findings to decision maker(s)

The following checksheet contains a list of possible actions that can be taken during this step. Indicate the actions that are taken and make summary notes about the results.

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		Reporting the Findings	
		There is an explanation of why the needs analysis was done	
		There is a description of how the information was gathered	
		The findings of the needs analysis are included	
		The significance of the findings are specified	
		Other	

Step 7 Decision maker(s) determine the training opportunity

The decision maker (s) identifies the specific opportunity of the organization for which training resources should be allocated.

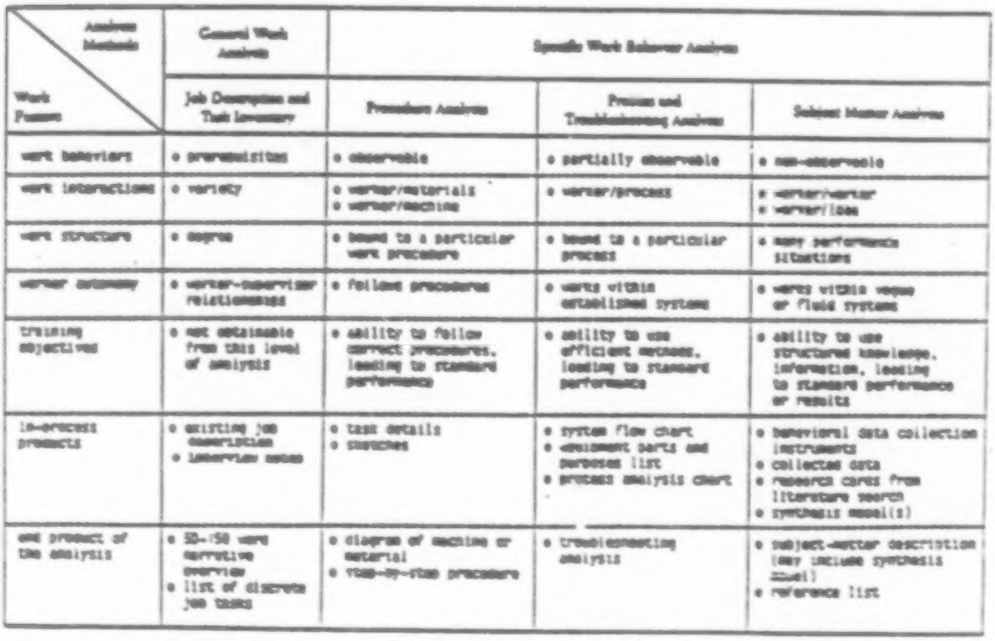
Phase 2 Work Behavior Analysis

Step 1. Identify the work to be analyzed.

Based on the decisions made in phase 1, specify the work that will be analyzed

Step 2 Construct a Work Behavior Analysis Plan

Use the work factors and analysis methods table (Swanson and Gradous, 1986) to determine the specific work behavior analysis method that will be used.



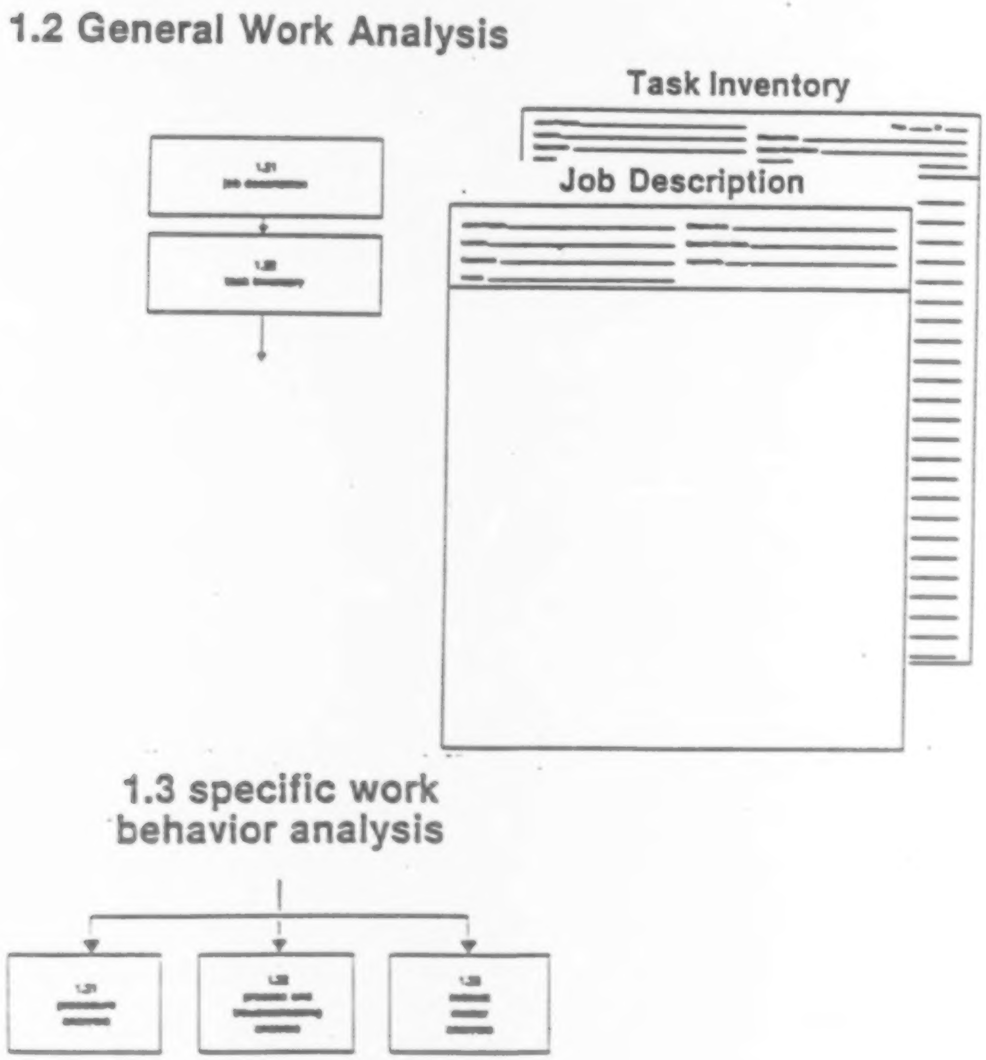
Analysis Methods / Work Features	General Work Analysis	Specific Work Behavior Analysis		
	Job Description and Task Inventory	Procedure Analysis	Process and Troubleshooting Analysis	Subject Matter Analysis
work behaviors	• prerequisites	• observable	• partially observable	• non-observable
work interactions	• variety	• worker/materials • worker/machine	• worker/process	• worker/worker • worker/idea
work structure	• degree	• bound to a particular work procedure	• bound to a particular process	• many performance situations
worker autonomy	• worker-supervisor relationships	• follows procedures	• works within established systems	• works within vague or fluid systems
training objectives	• not obtainable from this level of analysis	• ability to follow correct procedures, leading to standard performance	• ability to use efficient methods, leading to standard performance	• ability to use structured knowledge, information, leading to standard performance or results
in-process products	• existing job description • interview notes	• task details • sketches	• system flow chart • equipment parts and purposes list • process analysis chart	• behavioral data collection instruments • collected data • research cards from literature search • synthesis model(s)
end product of the analysis	• 50–150 word narrative overview • list of discrete job tasks	• diagram of machine or material • step-by-step procedure	• troubleshooting analysis	• subject-matter description (may include synthesis model) • reference list

Work features and analysis methods.

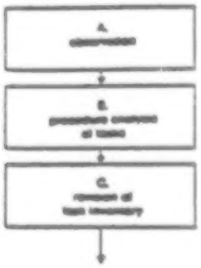
Source: *Performance at Work: A Systematic Program for Analyzing Work Behavior* by R. A. Swanson & D. Gradous, 1986, New York: Wiley.

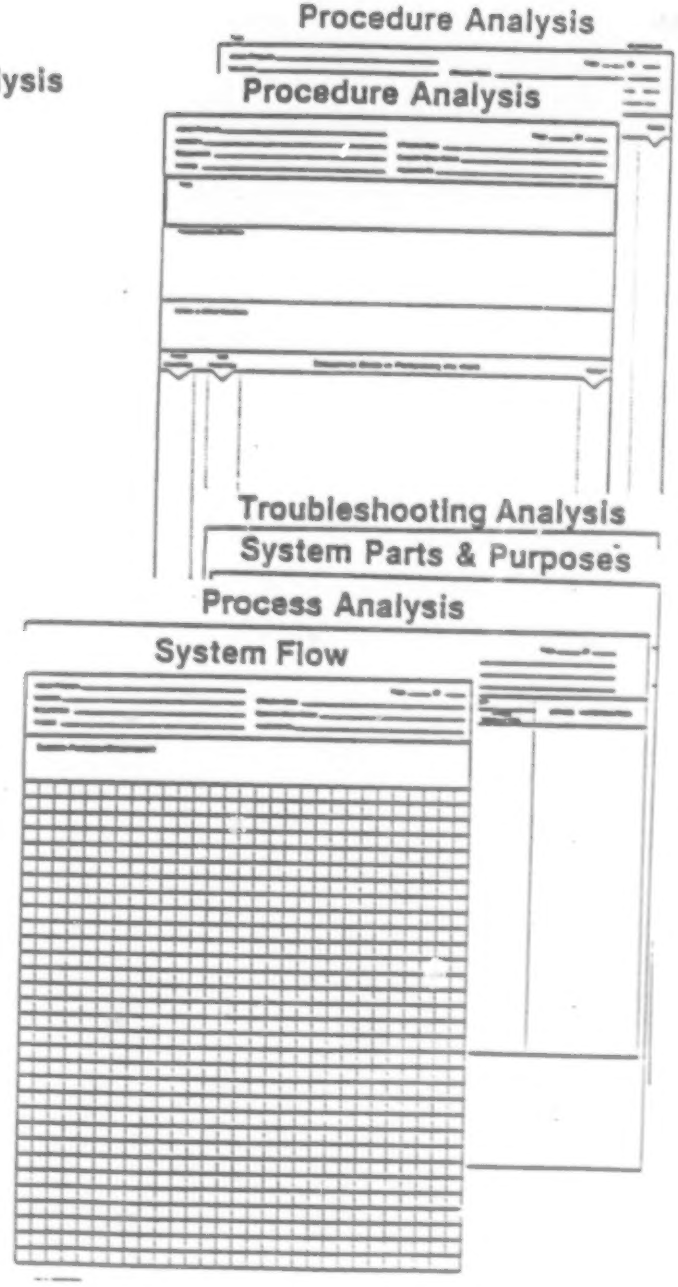
3. Conduct the work behavior analysis

Select the appropriate TTS forms and complete the general and specific work behavior analysis.

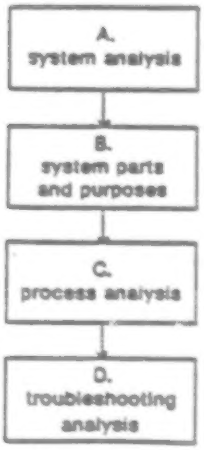

1.2 General Work Analysis
Task Inventory
Job Description
1.3 specific work behavior analysis

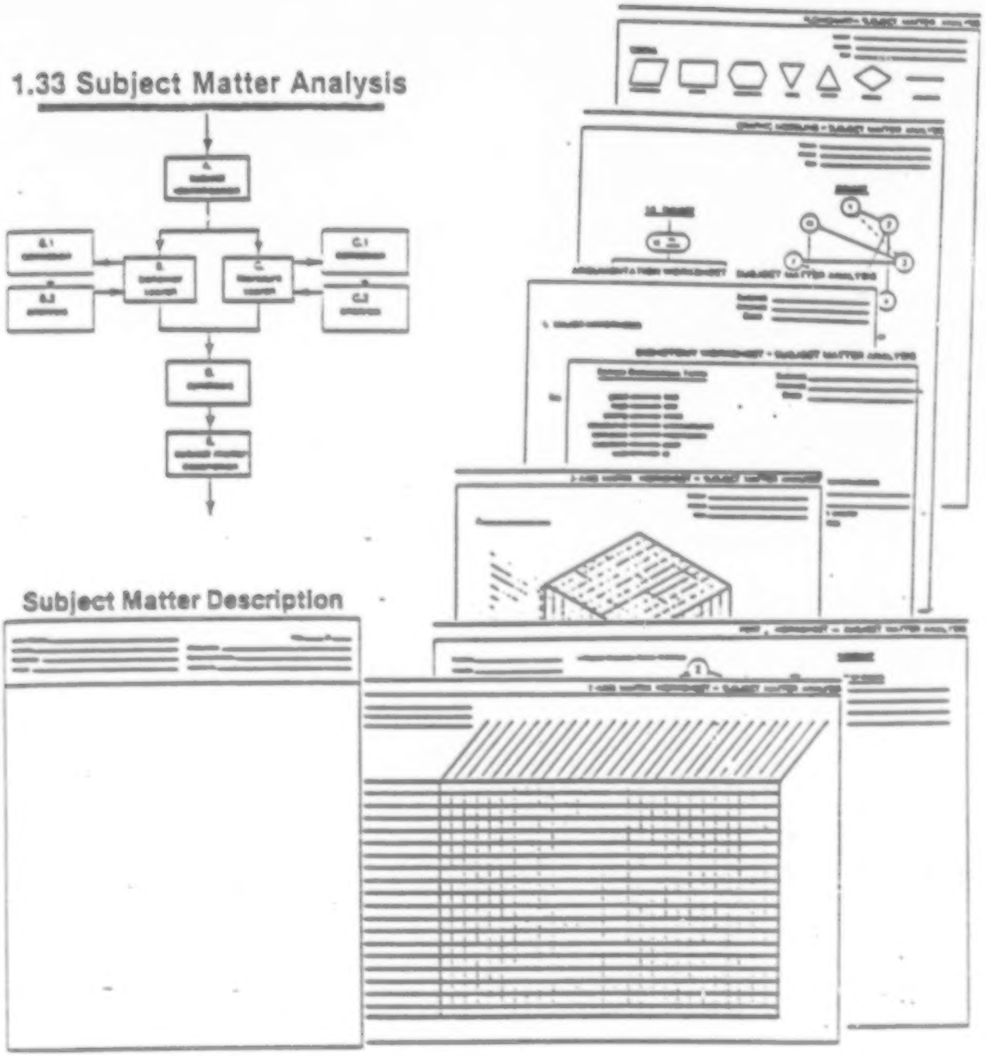
1.31 Procedure Analysis




Procedure Analysis
Procedure Analysis
Troubleshooting Analysis
System Parts & Purposes
Process Analysis
System Flow

1.32 Process and Troubleshooting analysis


A.
system analysis
B.
system parts
and purposes
C.
process analysis
D.
troubleshooting
analysis


1.33 Subject Matter Analysis
Subject Matter Description

Step 4 Gather anecdotal information

Gather and record ancedotes, stories, and vocabulary that can be used in the instruction. Record the sources and the context.

PHASE 3 Analysis of Individual Capabilities

Step 1 Identify characteristics and capabilities of the group of trainees

Identify measures of job performance and record them

Identify the target population and their characteristics

Step 2 Gather ancedotal information

Gather and record ancedotes, stories, and vocabulary that can be used in the instruction. Record the sources and the context.

Step 3 Analyze Infomation

Determine the knowledge, skills, and attitudes that persons need to better perform the job

Step 4 Report the findings to the decision maker(s) and to those who need to know

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		Reporting the Findings	
		There is an explanation of why the needs analysis was done	
		There is a description of how the information was gathered	
		The findings of the needs analysis are included	
		The significance of the findings are specified	
		Other	

Appendix D

Information Given to the Needs Assessment Experts In Addition to the First Draft of the PAT Model

TRAINING and DEVELOPMENT RESEARCH CENTER
University of Minnesota
1954 Buford Avenue
St. Paul, MN 55108
(612) 624-1296 or (612) 624-7481

July 10, 1989

Dear :

Thank you for agreeing to help in the process of validating the Performance Analysis for Training (PAT) Model. As we discussed on the phone, I am a University of Minnesota doctoral student in Vocational Education with a specialization in training and development. Currently I am working on my doctoral research project and am requesting your expert assistance. The purpose of my research is two-fold--to create a conceptual model that can be used to identify the training needs of an organization, and to validate the model.

Two other experts have also been asked to provide validation. The PAT Model is unique because it assumes that an organization is a systemic, cultural, political, and rhetorical entity. Consequently, the model is based on theory from the literature on training needs assessment as well as on the literature of organizations as systemic, political, cultural, rhetorical entities. The model is also unique because it details the phases, steps, and activities for implementing a needs assessment based on the three phases of training needs analysis--organization analysis, work behavior analysis and analysis of individual capabilities.

At this time, I am asking you to determine whether the model is valid. The first section of the enclosed papers contains an illustration of the conceptual model and a description of the elements. The second section, beginning with page 1, contains the phases and steps of the model, and the worksheets for implementing a training needs assessment. In the third section, some of the authors who have written about specific needs assessment phases, steps, or activities are identified.

The fourth section contains questions about your response to the PAT Model. I would like you to indicate whether the model, the process phases and steps reflect the training needs assessment process as practiced and as described in the literature, whether there is harmony between the components, and whether the model is complete. I would also like your suggestions for improvements in the model. I have enclosed a self-addressed, stamped envelope. The model will be modified to incorporate, where possible, suggestions from all the experts, and the sources of the suggestions will be acknowledged. The model will then be implemented within an organization.

Additionally, I would like you to determine after the model is implemented whether the process of the actual assessment matches the steps specified in the model. To complete this step, you will be asked to (1) compare the description of the actual assessment with the model, (2) note similarities and discrepancies between the two, (3) evaluate the effectiveness of the PAT Model and (4) return your responses to me. At the conclusion of the research project, I will send you and the other two experts copies of the final report on the research.

I am expecting this to be an interesting and worthwhile project. Thank you in advance for your help.

Sincerely,

Catherine M. Sleezer
Research Assistant

Section 3: Sources

This worksheet and the worksheets on the pages that follow identify some of the authors who have written about a specific phase, step, or activity.

Phases and Steps of the Performance Analysis for Training Model

PHASE 1: Organization Analysis

Determine where in the organization the training emphasis should be placed (McGehee & Thayer, Goldstein, Zemke & Kramlinger, Swanson & Gradous)

1. Identify "perceived opportunities" (Bjorkquist)
2. Determine the purpose and the parameters of the analysis (Bjorkquist, Rossett)
3. Gather information about potential training opportunities/needs(Bjorkquist)
4. Gather anecdotal information (Borman)
5. Analyze information (Bjorkquist)
6. Report the findings to decision maker (s) (Zemke & Kramlinger)
7. Decision maker(s) determine training opportunity (Zemke & Kramlinger)

PHASE 2: Work behavior Analysis

Identify and document the specific behaviors needed to accomplish the work (McGehee & Thayer, Goldstein, Zemke & Kramlinger, Swanson & Gradous).

1. Identify the work to be analyzed. (Swanson & Gradous)
2. Construct a work behavior analysis plan (Swanson & Gradous)
3. Conduct the work behavior analysis (Swanson & Gradous)
4. Gather anecdotal information (Borman)

PHASE 3 Analysis of Individual Capabilities

Determine which employees need training and the kind of training that they need. (McGehee & Thayer, Goldstein, Zemke & Kramlinger)

1. Identify characteristics and capabilities of the group of trainees (Goldstein)
2. Gather ancetodal information (Borman)
3. Analyze information (Goldstein)
4. Report findings to the decision maker(s) (Zemke and Kramlinger) and to those who need to know (Rossett)

Phase 1 Analysis of Organization

Step 1 Identify "perceived opportunities" (Bjorkquist, Zemke & Kramlinger)

List the perceived opportunities and identify the individual(s) who view it as important. Then determine which of the perceived needs are related to the organization's bottom-line and how are they related.

	perceived opportunities	perceived by
1		
2		
3		
4		
5		
6		

Which of the perceived opportunities are related to the organization's bottom-line?

How are the perceived opportunities related to the bottom-line ____________________

____

____

____

____

____

Step 2 Determine the purposes and the parameters of the analysis.

Step 2a Use the following chart to identify the salient characteristics of the decision maker, the analyst, and the organization and to record summary notes

yes	no	characteristics	summary notes
		Organization climate for training (Goldstein)	
		reward structure (Goldstein)	
		amount of consensus/conflict within the organization (Goldstein)	
		the organization's internal and external environment (Goldstein, Watson) organization goals (Goldstein)	
		organization philosophy, emphasis, and objectives (Goldstein)	
		legal, social, economic and political factors (Goldstein)	
		values promoted by the organization (Goldstein)	
		type of program being instituted (Goldstein)	
		political factors surrounding the situation (Rossett)	
		supporting systems such as selection, human factors engineering and work procedures (Goldstein)	
		other	
		Analyst internal/external consultant (Glidewell)	
		biases in gathering information (Goldstein)	
		skill level (Goldstein, Glidewell)	
		type of power (Glidewell)	
		style and experience of the analyst (Glidewell)	
		other	
		Decision maker(s) expectations of the decision makers (Goldstein, Rossett)	
		amount of support for training (Georgenson & Del Gazio)	
		amount of consensus among decision makers (Goldstein)	
		other	

Step 2b Using the information from step 1 and step 2a, determine the purpose and parameters of the performance for training analysis. Specify the purpose of assessment (Rossett), kinds of information to be gathered, the resources available to conduct the analysis, the boundaries of the needs assessment, the kind of analysis, the format of the report (Zemke & Kramlinger), the recipient(s) of the report (Zemke & Kramlinger), and the criteria that will be used to evaluate the analysis process, and the product. (Zemke & Kramlinger).

Do the decision maker(s) and the analyst agree about the purpose and parameters of the analysis? yes? no?

Is the agreement appropriate based on the organization's salient characteristics yes? no?

Step 3 Gather information about potential training opportunities/needs

The following checksheet contains a list of possible actions that can be taken during this step.

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		The process begins at the most general level and proceeded to the specific.	Gilbert
		Multiple sources and information gathering methods are used.	Goldstein
		Both quantitative and qualitative information are gathered	
		Performance expectations are examined.	Harless
		Actual performance is examined.	Harless
		Information is gathered about possible causes and potential solutions.	Harless
		Information is gathered about potential trainees.	
		Those who support and those who do not support the training opportunities/ needs are identified.	Rossett
		The purpose and parameters of the analysis are renegotiated if necessary.	

Step 4 Gather ancedotal information (Borman)

Gather and record ancedotes, stories, and vocabulary that can be used in the instruction or that can be used to justify instruction. Record the sources and the context.

Step 5 Analyze information

The following checksheet contains a list of possible actions that can be taken during this step.

(Sources) Analyze information
Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		Training and non-training issues are identified.	Harless
		Causes of performance are determined.	Harless
		Data analysis is verified with those who provided the data input	Bjorkquist
		Determine solution alternatives	Harless
		Potential opportunities are prioritized	Glidewell
		The financial benefits of selected options are forecast.	Swanson & Gradous
		The purpose and parameters of the analysis are renegotiated if necessary.	

Step 6 Report the findings to decision maker(s) and to those who need to know.

The following checksheet contains a list of possible actions that can be taken during this step. Indicate the actions that are taken and make summary notes about the results.

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		Reporting the Findings	
		There is an explanation of why the needs analysis was done	
		There is a description of how the information was gathered	
		The findings of the needs analysis are included	
		The significance of the findings are specified	
		Other	

Step 7 Decision maker(s) determine the training opportunity

The decision maker (s) identifies the specific opportunity of the organization for which training resources should be allocated (Zemke & Kramlinger).

Phase 2 Work Behavior Analysis

Step 1. Identify the work to be analyzed (Swanson & Gradous).

Based on the decisions made in phase 1, specify the work that will be analyzed

Step 2 Construct a Work Behavior Analysis Plan (Swanson & Gradous)

Use the Work Factors and Analysis Methods Table (Swanson and Gradous Performance at Work) to determine the specific work behavior analysis method that will be used.

Step 3. Conduct the work behavior analysis (Swanson & Gradous)

Select the appropriate TTS forms and complete the general and specific work behavior analysis (Swanson & Gradous)

Step 4 Gather anecdotal information

Gather and record ancedotes, stories, and vocabulary that can be used in the instruction. Record the sources and the context.

PHASE 3 Analysis of Individual Capabilities

Step 1 Identify characteristics and capabilities of the group of trainees

Identify measures of job performance and record them (McGehee & Thayer)

Identify the target population and their characteristics

Step 2 Gather ancedotal information

Gather and record ancedotes, stories, and vocabulary that can be used in the instruction. Record the sources and the context.

Step 3 Analyze infomation

Determine the knowledge, skills, and attitudes that persons need to better perform the job

Step 4 Report the findings to the decision maker(s) and to those who need to know

Directions: Indicate the actions that are taken by checking "yes" and record summary notes.

yes	no	actions	notes
		Reporting the Findings	Rossett
		There is an explanation of why the needs analysis was done	Rossett
		There is a description of how the information was gathered	Rossett
		The findings of the needs analysis are included	Rossett
		The significance of the findings are specified	Rossett
		Other	

Section 4: Evaluation

After you have reviewed the PAT needs assessment model, please answer the following questions.

1. Does the model accurately reflect the needs assessment process as it is practiced and as it is described in the literature?

2. Is there harmony between the components of the model?

3. Is the model complete? If not what should be added?

4. What suggestions do you have for improving the model?

5. What suggestions do you have for implementing the model?

6. In the final report, your name will be included as an expert. A short description of each expert's experience in the field of training needs assessment will also be included. Please indicate what you would like to have included in the description.

Please return these two pages and additional comments or suggestions that you wish to make in the attached envelope. Thank you again for your help.

Appendix E

Suggestions and Comments Made by Needs Assessment Experts When Determining the Content and Face Validity of the PAT Model

Three experts reviewed the PAT Model to determine that it accurately reflected the needs assessment process as practiced and as described in the literature. The three experts who consulted are Mr. Paul Habegger, Dr. David C. Bjorkquist, and Dr. Gary D. Geroy. Each expert met with the investigator and discussed his perceptions about the PAT Model. Each expert noted that there was harmony between the components of the model and that the model was complete. In addition, each expert made suggestions and comments about the specifics of the model. The following list contains the comments and suggestions made specifically about the components of the PAT Model. The expert who made each comment is identified. The comments and suggestions are organized and presented relative to the conceptual model, the phases and steps of the PAT Model, and the worksheets for the PAT Model.

Conceptual Model

- Bjorkquist noted that the extent by which the circles overlap can vary from situation to situation. For example, there could be one decision maker or a mega-organization with multiple decision makers.
- Habegger questioned if the circles in the conceptual model had to be the same size or if the could vary depending on the situation.
- Habegger felt that the description of Figure 1 needed to be expanded.
- Habegger felt that the context and culture ideas needed to be tied to the organization characteristics.
- Habegger noted that the definition of organization characteristics was broad in that it also included the organization's internal environment and the external environment in which the organization operated.

- Habegger suggested that the third phase of analysis should focus on attitudes in addition to knowledge and skills.
- Geroy noted that the relationship between the conceptual model, the phases and steps of the model, and the worksheets was not clearly articulated.
- Bjorkquist noted that, as it is explained, Phase 1 included only culture and context and questioned if it did not include all the characteristics of organizations that had previously been identified.

Phases and Steps of the Model

Phase 1

- Bjorkquist noted that this phase could focus on the organization, or if the organization were large, one work group in the organization.

Phase 1, Step 7

- Habegger suggested adding words to indicate that the decision makers acknowledge/prioritize the training opportunities in addition to making the determination about the needs.

Phase 3

- Habegger noted that the employees who needed training should be obvious from the information that was gathered in Phases 1 and 2.
- Habegger suggested adding information about the nontraining components of performance.
- Habegger suggested making spelling and formatting changes.
- Geroy suggested a number of formatting changes.

Worksheets

Phase 1, Step 1

- Habegger commented that the questions, Which of the perceived opportunities are related to the organization's bottom line? and How are the perceived opportunities related to the bottom line? were excellent and crucial.
- Habegger noted that Phase 1, Step 1, was part of the sales, or discovery, process between the analyst and the client.
- Bjorkquist suggested adding the question, What is the product of the organization or work group?
- Bjorkquist suggested adding the question, Who is the client?
- Bjorkquist suggested that analysis is done after the identification of the organization's product and again after the determination of which perceived opportunities are related to the organization's bottom line.
- Bjorkquist noted that the information gathered in this step can be misleading and that people at different places in the organization have different perceptions of the opportunities/needs.
- Bjorkquist highlighted the importance of separating training from nontraining issues and concentrating on the training issues. He also commented that while some analysts seem drawn to organization-development issues, these issues should only be a focus when they are barriers to the training.

Phase 1, Step 2

- Bjorkquist noted that Step 2 is important because the focus should be on developing people, and the analyst should not get sidetracked into doing something else (e.g., ergonomic design).

Phase 1, Step 2a

- Habegger observed that the form contained questions that could guide the analyst in designing the needs assessment, but that insufficient space had been allotted for actually recording all the information related to these questions.
- Habegger suggested that the support for training, which included dollars and the other resources allocated to training, also be considered as part of the climate for training.
- Habegger suggested considering the legal, social, economic, and political factors inside and outside the organization.
- Habegger questioned what was meant by the "type of program that was being implemented." (The investigator explained that this item was meant to refer to a broader program of which training is one element, such as a total quality improvement program.)
- Habegger suggested adding the following decision maker characteristic: the level of the person's position in the hierarchical organization.
- Bjorkquist said that climate for training could include the history, the amount of support that the training function has, and the location of the training department in the organization
- Bjorkquist observed that the reward system may be perceived differently by those who receive the rewards and those who give them out.

- Bjorkquist noted that a number of organization characteristics could be subsumed under the heading of organization culture. These include organization goals; organization philosophy, emphasis, and objectives; legal social, economic, and political factors; values promoted by the organization; amount of consensus/conflict; climate for training; support for training; history of training; and location of the training function.
- Bjorkquist said that the political factors that surround a situation could be internal or external to the organization or both.
- Bjorkquist suggested that the terminology used in the organization should be noted.
- Bjorkquist noted that the analyst characteristic of internal or external consultant could have important implications because the external consultant may have difficulty in getting close enough to know the culture. However, because the external consultant will leave at the end of the project, he or she may be willing to "get bloodier".
- Bjorkquist suggested that for the analyst characteristic of biases in gathering information, the operational definition of bias should include the attitudes, beliefs, and values that could affect the needs assessment situation.
- Bjorkquist noted that the type of power the analyst has in the situation is important. He also said that an external analyst might not have the opportunity to build some kinds of power bases. For example, the analyst may not have sufficient time to build a strong network or to become an expert in a manufacturing technology.
- Bjorkquist said that all the decision maker characteristics that were identified are important.

- Bjorkquist said that the expectations of the decision makers can be a function of the amount of risk they are willing to take and the reasons why the organization is investing in training.
- Bjorkquist noted that if the needs assessment is a proposal for action, then the analyst must know the customer, or the action won't happen.
- Bjorkquist suggested adding the following decision maker characteristics: (a) style and experience of the decision makers and (b) the skill level of the decision maker.

Phase 1, Step 2b

- Habegger commented that this step was excellent.
- Habegger suggested that the first question be rewritten as a statement indicating the need to reach agreement between the decision maker and the analyst about the purpose and parameters of the analysis before proceeding further in the process.
- Bjorkquist noted that it was useful to determine the purpose and parameters of the performance analysis for training at this point and that the purpose and parameters would also have to be fine-tuned or determined again later in the process.
- Bjorkquist suggested identifying the criteria that would be used to evaluate the proposed solutions as well as the analysis process and product.
- Bjorkquist noted the importance of the question, Do the decision makers and the analyst agree on the purpose and parameters of the analysis? He also stated that there are strategies for negotiating this agreement and that the important thing was that there be no surprizes for the decision maker.

Phase 1, Step 3

- Habegger stated that information should be gathered about how performance is measured.
- Habegger commented that using multiple sources and information gathering methods was fantastic.
- Habegger said that it might be important to be more explicit about future performance expectations.
- Habegger suggested adding the action "Gather information about the identity of the subject matter experts."
- Habegger stated that renegotiating the purpose and parameters of the needs assessment should not be necessary at this point.
- Bjorkquist stated that it could be appropriate to renegotiate the purpose and parameters of the analysis during this step.
- Bjorkquist noted that the action "Information is gathered about possible causes and potential solutions" is a simple statement but that the task of separating symptoms from solutions is a complex one and that the solution finder from *Training Technology System Abridged Edition* (Swanson & Sisson, 1985) might be a helpful tool.

Phase 1, Step 4

- Habegger suggested that a more formal term than *anecdotal information* be used to describe this step. He suggested using terms such as *case studies, success stories, positive/negative examples.* In discussions with the investigator, both noted that anecdotal information includes the more formal terms. The decision was made to not make this change unless a better term could be identified.

- Habegger stated that information could also be gathered to justify the instruction.

Phase 1, Step 5

- Habegger suggested elaborating on the nontraining issues.
- Habegger observed that having the data analysis verified by those who provided the data input is ideal but not always possible.
- Habegger observed that prioritizing potential opportunities is critical at this point.
- Habegger suggested adding either the word *issues* or *deficiencies* to the action "Causes of performance are determined."
- Habegger suggested noting that the financial benefits should be related to the bottom line.
- Bjorkquist suggested that the order of the actions in this step be changed so that the verification of data precedes the determination of causes of performance, which precedes the identification of training and nontraining issues.
- Bjorkquist suggested that the action of determining the criteria for selecting solutions be included.

Phase 1, Step 6

- Habegger said that the significance of the findings should answer the *so-what* question for the client.
- Habegger suggested action planning with the client about what he or she wants and how the gap can be bridged.

- Bjorkquist suggested that the document "Proposal for the Training Solution of A Need" by Hansen, Suarez, and Bjorkquist (1989) might be useful to consider in thinking about what to include in reporting the findings of the needs analysis.

Phase 2, Step 2

- Habegger stated that a combination of work behavior analysis methods would have to be used in analyzing behavior.
- Habegger observed that the methods used to gather the information (e.g., interview, focus groups, observation, questionnaire) were not specified in this step.
- Bjorkquist agreed with using the forms and methods from the book *Performance at work: A systematic program for analyzing work behavior* (Swanson & Gradous, 1986).

Phase 2, Step 4

- Habegger suggested that a more formal term be used to describe the anecdotal information.
- Bjorkquist said that the model may be nonlinear in that some of this information may have been gathered earlier in the process.

Phase 3, Step 1

- Habegger suggested that the instructional designer be involved in looking at preliminary results at this time.
- Bjorkquist said that it was important to identify the true measures of performance, that is, the measures that were really used.

- Bjorkquist noted that there might be clues about the true measures of performance in the job description and also that there might be inconsistencies among people about how performance is measured. For example, the people on the floor could be using one measure of performance and the boss could be using another measure of performance. In this situation, it would be important to determine which measure of performance was the true measure.

Phase 3, Step 2

- Habegger suggested that this information be gathered much more formally and that it include gathering both negative and positive examples.
- Bjorkquist commented that using the vocabulary of the work place can enhance the credibility of the analysis.

Phase 3, Step 3

- Bjorkquist observed that in this step the information was being synthesized and analyzed.
- Bjorkquist noted that the solution finder described in *Training Technology System Abridged Edition* (Swanson & Sisson, 1985) could be used here to help in synthesizing information.
- Bjorkquist noted that information from the whole needs assessment comes together in this step.

Phase 3, Step 4

- Habegger suggested action planning with the clients as the last action of this phase.

- Bjorkquist suggested that communicating the findings to those who will design the training should be a separate step.
- Bjorkquist suggested that the stories and anecdotes that were gathered be communicated to the decision makers and to those who will design the training.

Sources

- Habegger suggested that full references and a bibliography would be useful.

Other

- Geroy suggested making sure that all items on the worksheets are aligned spatially.
- Bjorkquist noted that the research may show that the model is not linear, but circular, in that information gathered at one time is used later in the process.
- Bjorkquist observed that the PAT Model incorporates both the determination of training needs plus the gathering of content for the training.

Appendix F

Event Write-Ups

The write-ups that follow detail how the Performance Analysis for Training (PAT) Model was implemented in an organization. The write-ups are organized chronologically. Each relates to a single event or to a series of very closely related activities.

While implementing the PAT Model, the Analyst identified the apparent effects of the organization, the decision makers, and the analyst, as well as their interactions on the products and the process of the training needs assessment. The effects are highlighted in the footnotes.

Abbreviations used to identify the participants are as follows:

Director	Director of the University of Minnesota Training and Development Research Center
MTD	Manager of Training and Development
OM	Manager of Operations
President	President of Money Systems Company
RM	Regional Manager
ST	Sales Trainer
SrVP	Senior Vice President
TDS	Training and Development Specialist
VPDA	Vice President of Development and Acquisitions
VPHR	Vice President of Human Resources
VPIS	Vice President of Information Services
VPM	Vice President of Marketing
VPS	Vice President of Sales
VPF	Vice President of Finance

LIST OF EVENTS

Event 1	Initial discussion with the Manager of Training and Development about a needs assessment project.
Event 2	Initial visit to Money Systems Company (MSC) to learn more about the company and the needs assessment project.
Event 3	Meeting with the Manager of Training and Development and others to reach agreement on the purpose and scope of the research projects.
Event 4	Meeting with the Vice President of Human Resources to get approval for the training projects.
Event 5	Review of written material to learn about MSC including its history, key players, operation, goals, culture, and rhetoric.
Event 6	Interview with the Manager of Training and Development to review the PAT Model and to specify the purposes, the perceived opportunities, and the parameters of the needs assessment project.
Event 7	Tour of Money Systems Company corporate headquarters to observe how work got done at MSC and to learn the messages given to new employees about the company.
Event 8	Meeting with the Vice President of Human Resources and the Manager of Training and Development to plan the next step of the needs assessment project.
Event 9	Interview with the Sales Trainer to learn about sales training.
Event 10	Interview with the Training and Development Specialist to learn about training needs at Money Systems Company.
Event 11	Telephone call to the Director of the Training and Development Research Center.
Event 12	Telephone calls to schedule interviews.
Event 13	Interview with the Vice President of Marketing to gather information for Phase 1.
Event 14	Meeting with the Manager of Training and Development to inform him about the meeting with the Vice President of Marketing.

Event 15	Interview with the Vice President of Information Services to gather information for Phase 1.
Event 16	Interview with Training and Development Specialist to gather information for Phase 1.
Event 17	Interview with the Senior Vice President to gather information for Phase 1.
Event 18	Interview with the Vice President of Human Resources to gather information for Phase 1.
Event 19	Interview with the Vice President of Sales to gather information for Phase 1.
Event 20	Interview with the Vice President for Development and Acquisitions to gather information for Phase 1.
Event 21	Interview with the Manager of Operations to gather information for Phase 1.
Event 22	Analysis of information gathered for Phase 1.
Event 23	Telephone call to the Manager of Training and Development to give him a progress report.
Event 24	Meeting with the Manager of Training and Development to give him a copy of the in-process report.
Event 25	Meeting with the Vice President of Human Resources to review the in-process report.
Event 26	Interview with the Vice President of Finance to gather information for Phase 1.
Event 27	Interview with a Regional Manager to gather information for Phase 1.
Event 28	Telephone call to the Manager of Training and Development to have him identify the person to calculate costs and benefits.
Event 29	Meeting with the Vice President of Finance to have him calculate performance value gain of proposed training programs.
Event 30	Review by the Analyst of the findings for Phase 1.
Event 31	Delivery to the Manager of Training and Development the final report for Phase 1.

Event 32	Meeting with the Vice President of Finance to have him calculate performance value gain of the proposed decision-making and project-management training programs.
Event 33	Meeting with the Vice President of Finance to have him calculate performance value gain of the proposed decision-making and project-management training programs.
Event 34	Meeting with the Vice President of Finance to have him calculate performance value gain of the proposed decision-making and project-management training programs.
Event 35	The revised Phase 1 Report was mailed to the Manager of Training and Development.
Event 36	Memo from the Training and Development Specialist about a vendor bid on customer-service training.
Event 37	Meeting with an external vendor to review a proposal for an individual assessment tool.
Event 38	Meeting with an external vendor to review a proposal for a customer service program.
Event 39	Telephone call from the Manager of Training and Development to share information.
Event 40	Delivery of the final report for Phase 1.
Event 41	Meeting with the Vice President of Finance and the Manager of Training and Development to plan strategy for gaining support to address training needs.
Event 42	Meeting with the Vice President of Finance to plan Phase 2 job analysis for customer service training.
Event 43	Telephone call to the Vice President of Finance to obtain written documents for job analysis.
Event 44	Meeting with the Vice President of Human Resources and the Manager of Training and Development to review Phase 1 of the needs assessment project.
Event 45	Telephone conversation with the Vice President of Finance about the meeting with the Vice President of Human Resources.
Event 46	Telephone conversation with the Manager of Training and Development about progress in gathering information.

Event 47	Telephone calls to financial professionals to set interview appointments.
Event 48	Telephone call from the Director of the Training and Development Research Center.
Event 49	Telephone calls to financial professionals to cancel the interviews.
Event 50	Telephone conversation with the Vice President of Finance to determine project status.
Event 51	Construction of a work behavior analysis plan.
Event 52	Meeting with the Vice President of Finance to review subject matter analysis.
Event 53	Meeting with the Vice President of Finance to plan individual analysis.
Event 54	Individual Analysis to determine which employees need training and the kind of training they need.
Event 55	Meeting with Vice President of Finance to review the individual analysis results.
Event 56	Meeting with the Vice President of Finance to plan a strategy for presentation of the final report.
Event 57	Meeting with the Vice President of Finance to review the final report.
Event 58	Telephone call to the President of MSC to arrange a meeting.
Event 59	Meetings with the President of MSC to review the final report.

Event 1: Initial discussion with the Manager of Training and Development about a needs assessment project.

Date: April 27, 1989.

Location: Telephone conversation.

Participants: The Manager of Training and Development (MTD) and the Analyst.

The Manager of Training and Development called to ask the Analyst to consult on a training needs assessment project with his company. The Analyst had previously worked as an external training consultant for the MTD when he was in the employ of another company.

During the telephone conversation, the MTD indicated that he had been employed by Money Systems Company (MSC) (a pseudonym) for less than a year and that the company was a private-sector financial corporation. MSC is a subsidiary of a larger corporation, Prine, Inc. (also a pseudonym). The MTD stated that while he intuitively knew what training was needed, it would be difficult to take his intuitive sense of the need to Prine, Inc., for funding. He felt that a training needs assessment strategy for MSC was needed.[1] The MTD also said that decision makers at MSC perceived that the organization was too slow in adapting to changes in the marketplace.[2] He indicated that the organization's decision makers perceived that training could provide employees with the knowledge and skills they needed to make the organization more successful in the marketplace.[3] The Analyst expressed an interest in the needs assessment project and explained that she was starting a research study that focused on determining in an organization the performance needs that could be addressed by training. This research study, which was to be supported by the University of Minnesota Training and Development Research Center, would involve developing and validating a performance-focused training needs assessment model. The Analyst suggested that if the MTD were amenable, the training needs assessment for MSC could be done as part of this research project. Funding such a study would be less costly than hiring a consultant. The Analyst warned the MTD that the research might take longer to complete than a normal consulting project.

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[1] Organization rhetoric, politics: The initial decision to conduct a training needs assessment was a political and rhetorical one. The MTD perceived that communicating an intuitive need to those in power would not be a convincing argument for obtaining additional resources, but he thought that communicating the results of a formal training needs assessment might produce the desired funding.

The MTD agreed that the needs assessment activity would make a good research project and indicated that he had other projects to fund in the areas of evaluation, curriculum development, and transfer of training. The MTD agreed to talk with the Director of the Training and Development Research Center about the potential projects.

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[2] Organization system: The perception was that the organization needed to better adapt to the external environment.

[3] Organization system, rhetoric : The MTD seemed to be reporting the perception of the organization's decision makers. Their perception was that training , which was a subsystem of the organization, could be used to help the organization adapt to the external environment.

In the meantime, the MTD arranged for the Analyst to visit the organization to receive an overview description of the current situation.

Event 2: Initial visit to Money Systems Company to learn more about the company and the needs assessment project.

Date: May 5, 1989.

Location: MSC's corporate offices.

Participants: The Manager of Training and Development (MTD) and the Analyst.

While visiting the company, the Analyst noticed that the corporate building was located in a suburb of a major city. The building was an attractive, modern granite-and-glass structure. From the outside, the impression was one of stability and security.[4] The Analyst got the impression that the building was well designed. A number of parking lots surrounded the building. Inside, the impression was one of glass and stone. The lobby was tastefully furnished with plants, trees, and benches. There were glass walls on two sides, which allowed visitors to look directly from the lobby into meeting rooms, offices, and shops. On one side were several small shops, including a jewelry shop and a sundry shop. On the other side, a glass door, which could be locked, separated MSC's reception area from the lobby. Visible from the lobby were MSC's meeting room with a marble table, the reception area, and parts of the Human Resource Department. The human resource reception area, and hallways, and one attractive office also were visible from the lobby.[5]

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[4] Organization rhetoric : The first impression given by the MSC building, the home of a financial organization, was one of security and stability.

[5] Organization culture: The building, as an artifact of the company, provides some clues about the company's culture. For example, the location of the building, the look and feel of its lobby, the

Both the company's main reception area and the human resource reception area were separated from the rest of the offices on the lobby level by walls paneled in wood. The reception area for MSC included a wall-sized display case that held photographs of the company's founding, newspaper stories about the company, and product promotions. The stories and promotions were about the company's successes from the years 1947 to 1965. A quick scan of the display case revealed that none of the memorabilia reflected recent successes.[6]

Access to other MSC offices on the lobby level was through a heavy wooden door located next to the reception lobby. This door could be opened only by inserting a plastic security card into a slot located on the wall adjacent to the doors.

To reach the Manager of Training and Development's office, the Analyst first had to register with the company receptionist and get a name tag. The Analyst then had to register with the receptionist in the human resource area

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choice to make some activities of the company visible to people in the lobby (who were not always members of the company), and the specific choice to make some human resource activities visible revealed something about how work got done at MSC.

[6] Organization culture: The choice of artifacts for the display case raised several questions about the culture: What things get displayed in this company? Did MSC have any successes since 1965 that could have been displayed? Was the time from 1947 to 1965 particularly important to the company?

and walk down the hall to check in with the human resource secretary. This secretary notified the MTD, who came out of an office to greet the the Analyst.[7]

During this visit, the MTD offered the Analyst a cup of coffee, and together they walked to the company cafeteria to get the coffee. The cafeteria was a large, open, and airy room that was reached by going through the heavy wooden door in the reception area and down a carpeted hallway. The hallway contained a display case where announcements of company events, such as the company picnic, were posted. The Analyst commented on the display case, and the MTD said that one of the things he liked about the company was the family atmosphere. For example, on the last Friday of the month, everybody in the company wore jeans.[8] Recently, the employees had voted to have a company picnic rather than a big Christmas party.[9]

The MTD and the Analyst sat in the cafeteria to meet. The Analyst commented that the cafeteria space was pleasant. The MTD responded that it had a different atmosphere from the manufacturing plants where he had worked. Because this was a financial processing company, the cafeteria was clean, and there were no manufacturing smells.

During his description of the training department, the MTD said that he had two people reporting to him. His department currently offered 16 management development courses and expected to offer 22 courses by the end of the year. Generally, there were about 12 to 18 participants per session. The MTD also spoke about the importance of a training needs assessment in management development and the importance of including both the national headquarters and the regional sales offices in the assessment. He said, "Our managers are unclear about what they are supposed to be doing. First-line and middle managers were promoted from within because they were good at what they did." The MTD also said that he would like to believe that the needs assessment would help managers define their role. He stated that knowing what competencies managers needed was important so that he could implement management development programs. He also hoped that the needs assessment would verify whether the current programs were meeting the performance needs of managers.

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[7] Organization culture: Security doors and multiple receptionists gave the impression that security was important at MSC.

[8] Decision maker characteristic: A characteristic of the MTD was that he liked a company with a family type of atmosphere.

[9] Organization culture: Based on the display box and the MTD's comments, MSC seemed to be a family type of company that included fun and socialization.

The Analyst again proposed to determine the organization's training needs and at the same time to conduct a formal research study on the process used to determine training needs. She described a project that would include (a) developing a model for determining the performance needs of the organization that could best be addressed with training, (b) having experts in the field of training needs assessment review the model, (c) implementing the model in the organization, and (d) determining the validity of the model based on a review of the results that were produced. The MTD commented that he could use a model to guide him in analyzing future training needs in the company and agreed to the informal proposal.

The MTD also commented that referring to the project as a needs assessment project done by a consultant or analyst would be better than referring to it as a research project. He pointed out that MSC had not supported research in the past. Management's real interest was in solving company problems, and soft-pedaling the research seemed to be the best way.[10] The Analyst indicated that she was comfortable with being referred to as a consultant or an analyst. She also pointed out that the research would impact the needs assessment process in three ways. First, developing the Performance Analysis for Training (PAT) Model and having it reviewed would take time. Second, the model would be used to guide the needs assessment process. Third, decision makers in the company would be asked to evaluate the needs assessment work at the end of the project. The MTD stated that this project would be on the cutting edge and that his boss would like it because he liked to be on the cutting edge.[11]

The MTD commented that he had phoned the Director of the Training and Development Research Center to talk about the research projects.

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[10] Organization rhetoric: The MTD was communicating the persuasive language to use at MSC.

[11] Organization rhetoric: The MTD was communicating language that seemed to reflect a characteristic of his boss.

Event 3:	Meeting with the Manager of Training and Development and others to reach agreement on the purpose and scope of the research projects.
Date:	May 17, 1989.
Location:	The Training and Development Research Center at the University of Minnesota.
Participants:	The Manager of Training and Development, Sales Trainer, and Training and Development Specialist; the Director of the University of Minnesota's Training and Development Research Center, and four University of Minnesota interns, including the Analyst.

The Training and Development Specialist, the Company Sales Trainer, the Analyst, and another intern arrived early for the meeting. After introductions were made, the Sales Trainer said that she had been hired to work with sales training and that she had not been with the company long. The Training and Development Specialist said that she had been with MSC for two years and that she loved the company because "such special people worked there." She stated that the company was "just one of those special places." The interns stated that they were doctoral students and researchers at the University of Minnesota. About this time, the other participants arrived and introductions were repeated.

The Analyst observed that MSC's trainers dressed in different styles. The MTD and the Sales Trainer both wore subdued clothing stereotypical of banker's attire. The Training and Development Specialist wore a form-fitting dress, a puffy hairdo reminiscent of the 1950s, and bold makeup.

The MTD described Money Systems Company. He said that the company was a financial processing company, that it was a smaller but more supportive company than others where he had worked, and that the company had a pattern of promoting from within.

The MTD then discussed his expectations for all the research projects. There would be four research projects—a needs assessment project, an evaluation project, a transfer-of-training project, and a training curriculum project.

In discussing the needs assessment project, the MTD explained that, at the present time, the development of courses was based on intuitive judgment. Most courses delivered by the training department had been purchased from external consultants. What he wanted was someone to put together a tool to identify training needs so that the competencies of supervisors, exempt employees, and managers (including sales managers) could be identified. The MTD also explained that at MSC a gap existed between where the company was and where it wanted to be. In this case, the gap meant that people were assigned to jobs for which they might not have the necessary competencies. The Human Resource Department needed the methodology and the tools to become prescriptive in helping each person in the organization gain the needed competencies. The MTD said that he also wanted to have a process by which he could determine training needs in the future.

The Director of the Training and Development Research Center asked the MTD who else at MSC believed that this gap in needed competencies existed. The MTD identified the President of MSC and the Vice President of Human Resources as people who shared this view.[12]

The MTD indicated that he was interested in looking at and measuring the competencies needed to perform work. He believed that the goal of measuring competencies was to make everyone successful, to help employees identify their strengths and goals, and to help people decide that they can learn or, possibly, that they don't belong in their current jobs.[13] The MTD commented that he wanted to go on a "competency campaign." He wanted to have competent people in positions at MSC. He stated that the training department "needed the methodology and tools to become prescriptive by person."

The Director of the Training and Development Research Center interjected that there is a difference between a competency-based model of needs assessment and a performance-based model. The competency-based model is often used in educational settings where an individual's ability is compared to a conceptual model of appropriate skills. By contrast, a performance-based model identifies the knowledge, skills, and attitudes required to perform a specific job. In business and industry, relating an individual's skills to the specific performance required to perform the work and subsequently attain a business goal is usually more important than relating an individual's skills to a conceptual model.

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[12] Organization politics: The question asked by the director of the Training and Development Research Center elicited information about the amount of support for this idea from people in power at MSC.

[13] Decision maker characteristics: The MTD believed that not all managers had the competencies needed for their jobs.

The MTD stated that work performance was the business goal of his company. He also stated that when he referred to competencies, he had meant comparing the competencies needed to perform the job with the competencies that the people had.

The Analyst pointed out that with a performance-based model the cost of identifying all the competencies for each management job in the organization would be astronomical. The MTD concurred with this statement and decided that the needs assessment project should focus on the training that managers needed to meet the business goals.

There was some discussion about when the projects would start. After everyone checked their calendars, it was agreed that the starting date would be the following week. The Analyst reminded the MTD that the first phase of the needs assessment project was to develop the PAT Model. Consequently, she would not gather information at MSC until after the model was developed. The MTD concurred.

The Director of the Training and Development Research Center asked the MTD if he would like to have a written proposal for each project. The MTD said that would be a good idea and then added that he would need four copies of each proposal. The MTD was asked what he specifically would like to have the proposals contain, and he indicated that for the needs assessment project, he needed a two-to-five-page proposal that focused on the steps involved in determining the training needs in the company.

The MTD also stated that he would schedule a meeting with the interns and the Vice President of Human Resources at MSC for the following week because he would like to involve the Vice President of Human Resources in these projects.

At the end of the meeting, the MTD asked the Training and Development Specialist if she had brought the information he had asked her to bring. She had copies of training materials, including such things as training manuals, evaluation forms, registration forms, follow-up letters, and background information on MSC. These documents were left for the interns to review.

The proposal for the needs assessment project was submitted the following week and is contained in Appendix H.

Event 4: Meeting with the Vice President of Human Resources to get approval for the training projects.

Date: May 23, 1989.

Location: MSC corporate offices.

Participants: The Vice President of Human Resources (VPHR), Manager of Training and Development (MTD), Sales Trainer, Training and Development Specialist, and the four interns from the University of Minnesota, including the Analyst.

This meeting was held in the "fishbowl," which is the room located off the reception area next to the Human Resource Department. Only a glass wall without curtains separated the room from the lobby of the building, and people in the lobby could observe all that took place.[14] The decor was plush—an oval, marble-topped table with 10 swivel chairs occupied the center of the room. The interns were offered coffee and were told that although they were allowed to bring coffee into the room, they had to put lids on the cups when transporting them from the cafeteria.[15]

During the meeting, the VPHR sat next to the Analyst. He reviewed the project proposals and asked about other projects that had been completed through the Training and Development Research Center (TDRC). The Analyst explained that the TDRC focused on projects involving people at work. She explained that the TDRC formed partnerships with business and industry to work on projects that would address the needs of the business and at the same time address research issues important in the field of training and development. For example, several years ago, the Analyst had worked on a project to evaluate executive development programs of a large financial institution.[16] The Analyst also commented that recently the TDRC had been focusing on ways to connect training to an organization's bottom line so that training could be seen as an investment rather than just a cost. The VPHR was interested in the perspective that training could contribute to the organization's bottom-line. He said that MSC's president had several times asked about what could be done to make training more effective in the organization.[17] There was some discussion about the idea that an investment is made with the expectation of a payback, whereas there is no expectation of a payback from a cost.

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[14] Organization culture: It was culturally acceptable that this meeting be visible to the public.

[15] Organization culture: A rule in this organization is that only covered coffee is transported.

The VPHR indicated that he had read the training proposals prior to the meeting. He asked each intern some specific questions about his or her project. The VPHR wanted to make sure that the Analyst knew that the Human Resource Department already had a lot of information that could be used for the needs assessment project. He specifically cited the Human Basic Ability Analysis, which provided information related to each job in the company. He also said that there were records for individuals.

The VPHR expressed a concern about the number of research projects. He did not want too many questionnaires going out to organization members. His perception was that "the company had already used so many questionnaires that people are burned out on them, and besides, questionnaires take too much time."

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[16] Analyst characteristics, organization rhetoric: The Analyst communicated her experience in working in the financial field.

[17] Organization politics, rhetoric: The VPHR was communicating the language of the company's president. As such, it was a political and a rhetorical statement.

The VPHR said that his main concern about training was that those who needed training might not be attending current training programs. He then stated that the key knowledge and skills for positions all across the company had already been identified. The Position Description Questionnaire included job descriptions, tasks, contact people, and the knowledge, skills, and attitudes needed to perform the job. He said that, in his estimation, 75 percent of the paperwork was already done for the needs assessment project. The VPHR also wanted to make sure that the Analyst knew that management development covered sales.[18]

He also said that, from his perspective, the culture of managers should be changed and asked the Analyst if she knew about the four levels of culture for managers. The Analyst replied that she was not familiar with this document and asked who the author was.[19] The VPHR indicated that he didn't know who wrote it, that he had gotten it at some meeting, and that he believed it. He said the document focused on leeway and latitude. The VPHR explained, "In the first level, management holds employees accountable; the fourth level is holding yourself accountable." The VPHR then began talking about the Manager of Operations, noting that he did not get along with her. He shook his head and stated that there was a real problem in the company with holding yourself accountable.[20] The VPHR then focused on the other projects. For example, he said that the evaluation project should include an action-planning step. The VPHR then stated that he needed a brief summary that he could take to the President. Specifically, he needed a two-page summary on all the projects.[21] The Analyst asked when he needed this report. He responded that he needed it within the week.

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[18] Organization politics, rhetoric: Because of his position in the organization, the VPHR had more power than the MTD, and the MTD wanted him to be involved on this project. The VPHR indicated his involvement with the project by commenting on the information that was available, by giving the Analyst clues about what was important, and by providing information about what to include in the project.

[19] Decision maker characteristics: The Analyst felt that she was being given a little test. Lack of familiarity with this document indicated that she did not know everything about the field. The test gave the VPHR a clue about the extent of the analyst's expert power.

The VPHR asked the Analyst what kinds of information were needed for the needs assessment. The Analyst indicated that as a starting point she needed written information about MSC, including background information about the company and the training department, information about Prine, Inc., the mission statement, the strategic plan, the organization chart, product information, customer information, performance information, information on critical measures such as turnover. In short, she needed performance information, historical information about the company, and any other pertinent information. The Analyst also requested that she be given a tour of the organization. The VPHR nodded his head and told the MTD to arrange it.[22]

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[20] Decision maker characteristics; organization rhetoric, culture: This sentence indicated that the decision maker was willing to communicate his dislike of a person to a group of insiders and outsiders. He used rhetoric to imply that the person's shortcoming was one of not holding herself accountable. This communication also implied that in this culture it was acceptable to not get along with someone who does not hold herself accountable.

[21] Organization culture, rhetoric: At MSC, this is the second example of communicating up the organizational hierarchy with a written summary of a project.

The Analyst said that she would also need access to people in the organization as well as to documentation. The VPHR said that the access would be available but that individual interviews could be set up by the MTD. He also said that before meeting with anybody, the interns needed letters of introduction. The VPHR then left the room and shortly thereafter so did the other training staff.

The interns then met with the MTD. The MTD stated that he thought that the meeting had gone very well. He indicated that the training department in this company was the strongest of all the divisions of Prine, Inc., and that the VPHR liked to be on the cutting edge.[23] He had noticed that the VPHR was impressed with the Analyst's previous experience evaluating the executive development programs of a competitor.[24] He also confirmed that the main issues for the VPHR were that the right people might not be getting through the right training course and that the results of training were not being evaluated. The MTD then commented that there would be a data base available by July 1 showing who had taken what courses. He added that this data base might be useful for the needs assessment project. There was some discussion about the comfort and the plushness of the chairs. The MTD agreed, then went on to say that this was a nice company to work for and that even the President eats in the company cafeteria.[25]

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[22] Decision maker characteristics; analyst characteristics; organization rhetoric: In this interchange the Analyst indicated her expert power by being able to name the items she needed without hesitating, and the decision maker gave his blessing to the project by nodding his head and directing the MTD to arrange it.

[23] Decision maker characteristics: The comment about being on the cutting edge was hearsay about the decision maker, but it might be true.

[24] Organization rhetoric: This communication confirmed the rhetorical power of the Analyst's original statement.

The Analyst discussed the needs assessment model that she would be building as part of the project and described the organization analysis, job analysis, and individual analysis phases. She also stated that the job analysis paralleled the process contained in the book, *Performance at Work: A Systematic Program for Analyzing Work Behavior* (Swanson & Gradous, 1986). The MTD was already familiar with this book and with Swanson's training technology system.

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[25] Organization culture: The president's eating in the cafeteria is a clue about the culture.

Event 5: Review of written material to learn about MSC, including its history, key players, operation, goals, culture, and rhetoric.

Date: July 13, 1989.

Location: The Training and Development Research Center.

Participants: The Analyst.

The Analyst received written materials from MSC's Manager of Training and Development, including background information about the company and the company's products, a monthly financial report, the reorganization statement, the management compensation manual and performance appraisal forms, a handout describing "The Four Management Styles of Organizations," and three strategic plans—one for the company, one for the Human Resource Department, and one for the training and development area.

The Analyst also reviewed the materials that had been provided to the interns on May 17, 1989. These included examples of training program announcements, registration forms, and evaluation forms, the sales needs assessment survey for the agency supervisors, the sales needs assessment survey for the account executives, the training calendar for the year, training guides for each module of the supervisory training program, and a list of the managers who support training by consistently sending large numbers of their employees to training programs.

The summary of information contained in each set of documents is as follows:

Promotional Materials

The company was started in 1940. In 1989, MSC offered five major financial processing products and services and employed approximately 1,000 people. The company's products were sold through six regional offices located throughout the country. From 1977 to 1987 Money Systems Company had experienced record earnings. The company had been acquired by Prine, Inc., in the 1960s.

Letter from the President

This letter from the President of MSC, issued in March 1989, focused on the company's reorganization. The president stated that MSC had been reorganized in the fourth quarter of 1988. He informed employees that the reorganization had been instituted because of a recognition that the company would have to be prepared to move into nontraditional lines of business. The reorganization allowed adjusting the organizational structure to permit implementation of the company's strategic plan. He also informed employees who had been appointed to the top positions at MSC.

The Four Management Styles of Organizations Handout

This handout contained descriptions of four systems of management. Each system depicted a level of managerial trust and control related to subordinates. In System 1, management had no confidence in subordinates, most of the decisions were made at the top and issued down the chain of command. Subordinates were forced to work through fear, threats of punishment, and occasional rewards. Need satisfaction was based on pay and job security. While the control process was highly concentrated in top management, an informal organization that opposed the goals of the formal organization had developed. At the other end of the continuum, managers in System 4 had compete confidence and trust in subordinates. Decision making was widely dispersed throughout the organization. Workers were motivated by participation and by their involvement in developing economic rewards, setting goals, improving methods, and appraising progress toward goals. All the social forces supported efforts to achieve stated organization goals.[26]

Monthly Financial Statement and Year-To-Date Figures

The financial statements indicated that the company had remained profitable by cutting costs. For the current year, the cuts had not been sufficient to result in a profit. The financial statements also indicated that the company had budgeted large sums for research and development but had recorded only small expenditures. The amount budgeted for training was also larger than in previous years, and, again, the expenditures had been minimal. The financial statements also provided clues about which numbers were important to the company, which of the company's products probably had the largest dollar volume, and which was the fastest growing. In this company, the product with the largest volume was not the fastest growing.

MSC Strategic Plan

The company's strategic plan was printed in February of 1989. It described a long-range plan that included growth and change. The expected changes included new clients, new products, and a new marketplace. It also included hiring 1,000 new employees within the year.

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[26] Decision maker characteristics: This handout summarized a set of beliefs about managing people. The content of the handout did not match the previous description by the VPHR.

The strategic plan described the major business thrust as growth and included a long-range vision of becoming by 1992 a nationwide provider of a service not currently offered by the company. The service would be offered in a highly competitive arena.

The company's strategic plan indicated a number of management actions, including the following:

- Make decisions within the strategic plan.
- Actively encourage entrepreneurship among the work force.
- Be the early adapters in the industry, be proactive in adapting the organization.
- Be a dominant force in the marketplace.
- Long-term corporate profitability will be paramount.
- The financial stability of the company will be paramount.
- Decision making will be decentralized with as much local autonomy as possible.
- All staff will be held accountable for accomplishing assigned tasks.
- The company will nurture creative ideas and people.
- managers will be expected to maintain a high level of morale among their staff.
- Leadership will be expected from all management.

The strategic plan also contained a section on education/training, which stated the following:

- A staff/management training program will be maintained.

- Individual development programs will be maintained for key contributors.
- A promotion readiness program will be maintained.
- Employees will be expected to participate fully in preparing a career development plan for themselves.

The Human Resource Department's Strategic Plan for 1989 to 1993

This plan emphasized improving employee knowledge, skills, and abilities to meet the future needs of the organization. The plan included ensuring statutory compliance in all human resource activities; managing proactive employment, compensation, and benefit programs; developing and marketing internal consulting services to all corporate departments, regions, divisions, and subsidiaries to assist them in building competitive advantages and achieving corporate results; and managing a comprehensive program of training and development to ensure the maintenance and development of work force skills and abilities to meet the future needs of the company. The plan also called for the development and implementation of a training and development strategic plan. The plan specified dates for accomplishing the goals.

The Training and Development Strategic Plan

This document highlighted the company's mission as a leader in its field. The document contained the following statement: "It is the responsibility of the Training and Development Department to support management in the communication of and training in the knowledges and skills which will enable employees to successfully perform their jobs." One of the basic strategies for reaching this objective was "to complete a comprehensive analysis to understand the environment and needs of the function desiring training and development and to determine the cost benefit (cost effectiveness) of the proposed options." The other strategies for meeting this objective focused on the design, development, implementation, and evaluation of training programs.

Training Registration Materials

Employees at MSC were informed about training courses through interoffice memos, and they registered for courses using the same type of memos.

Training Evaluation Forms

Training was evaluated by having participants complete a satisfaction form at the end of each training program. This form included ratings of the program content, the instructor, and the facility. It also contained space for writing reactions and suggestions and for indicating new programs that the trainee would like to see developed.

Sales Training Needs Assessment

MSC's training department was in the process of implementing a needs assessment to examine the training needs of MSC agency supervisors and account executives. From these needs assessment documents, it appeared that both agency supervisors and account executives managed sales forces. It was not clear how these sales forces differed from each other.[27] The instruments included a 14-page questionnaire that agency supervisors were to complete and a 20-page questionnaire that account executives were to complete. Both questionnaires listed a number of abilities and asked the respondent to rate first the importance of the ability and then their own skill level. Each survey also contained five open-ended questions that focused on what the person liked about the job, aspects of the job that they would change if they could, and what individuals at the regional and national level could do to help the individual better perform his or her job.

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[27] Organization culture: The terms used to label job positions were not understandable to someone who was an outsider to the organizational culture.

Training Calendar for the Year

The calendar contained descriptions of the courses and the dates on which the courses were offered. Listed courses included a basic supervisory course and 12 supervisory and management courses related to specific topics, such as time management and interpersonal relations. The training calendar also listed courses that focused on sales, nonexempt services, and computer training. According to a notation on the calendar, the computer training courses were delivered by the computer center, not by the training department.

Training Guides

The training guides for the modules of the supervisory training program were designed to be used by the trainees. They contained general information on the various topics.

Analysis of Written Materials

MSC's sales brochures contained information about products and services and about the processes used in making the products and services. The products and services offered by the company were explained in a roundabout way and with jargon so that even after reading pages of promotional materials, the Analyst was uncertain about what service was really being promoted and what benefit the customers gained by using the service.[28]

The written materials also contained information about how things were done at MSC, who did things in the organization, how the training department related to the HR department and to the larger organization. For example, the three strategic plans—for MSC, for the HR department, and for the training and development function—were not coordinated and seemed to be describing different companies. The company's strategic plan focused on a major future change, HR's strategic plan focused on maintaining the present conditions, and the training and development function's strategic plan focused on improving the current situation.

Within MSC's strategic plan, there were some discrepancies and missing pieces. For example, the plan contained a vision, but no clear strategy on how to achieve the vision. The plan called for decision making to be decentralized with much local autonomy and nurturing of creative ideas and people; however, it also indicated that all the staff would be held accountable for accomplishing their assigned tasks. The plan indicated that leadership would be expected from all managers; however, it indicated that individual development programs would be maintained only for key contributors.

The statement from MSC's President informing employees about the reorganization also provided clues about how things were done in the company. This statement was dated 2 months after the reorganization had begun. The statement informed employees that the company had been reorganized to meet the future strategic needs, but it provided no clues about the company's strategies for the future.[29] The Analyst wondered after reading this document if MSC had completed the reorganization and how the reorganization either had changed or was changing the company's culture.

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[28] Organization culture, rhetoric: The promotional materials contained language that was probably clear to insiders in the organization but not to an outsider who had some familiarity with the industry.

The training materials, which were samples of work done by the training and development function, offered an example of the acceptable level of work at MSC. The training guides seemed to consist of bits and pieces of various training packages that had been offered by local vendors. The training did not appear to be related to doing work within a financial company. There was little information about applying the skills. For example, the Team Building Module did not contain information on the skills that an individual needed to be a team player at MSC nor were there practice exercises. The courses that were reviewed would probably have been of most use to entry-level supervisors who had little knowledge of the topic area. The written course materials contained pages of information telling the reader about how important the topic was. However, the course materials contained neither conceptual models for understanding the topic nor specific how-to information.

The sales training needs assessment was in the process of being implemented. The two questionnaires that were being used for the sales training needs assessment were intimidating. Each instrument was so long that it would take between 1 and 3 hours to complete. Also, there were no criteria for individuals to use in self-assessing their performance and no information about how this collected data would be used by the training department.

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[29] Organization culture, rhetoric: This is an example of communication where employees were given information about a past action and information that the company would be different in the future, but no concrete information about what the changes would be or how they would affect the work of its employees.

The training calendar provided an overview of the training programs currently being offered at MSC. Most of the courses were general management courses. There was little technical training.

The written materials also provided information about some of the language that was used in the company, including jargon and acronyms. For example, the words *retail* and *financial* described different parts of the sales force because some of the sales force sold to retail operations and some sold to financial organizations.

Event 6: Interview with the Manager of Training and Development to review the PAT Model and to specify the purposes, the perceived opportunities, and the parameters of the needs assessment project.

Date: July 21, 1989.

Location: The office of the Manager of Training and Development.

Participants: The Manager of Training and Development (MTD) and the Analyst.

The Manager of Training and Development and the Analyst met to discuss the needs assessment project. As a first step, the Analyst reviewed the PAT Model with the MTD. These materials had been developed by the Analyst and had been reviewed by experts following the May 23,1989, meeting (Event 4). The MTD said he was impressed with the worksheets.

After reviewing the conceptual framework, the phases and steps of the PAT process, and all the worksheets, the Analyst mentioned that the needs assessment process was currently at Phase 1, Step 1, of the PAT Model and that her agenda for this meeting was to gather the information specified for Steps 1 and 2: Identify the perceived opportunities and determine the purpose and parameters of the analysis. The Analyst pointed out that the PAT worksheets would guide the discussion and that she would use the spaces on the worksheets to record information. Phase 1, Step 1, focused on identifying perceived opportunities. There were seven substeps in this process.

The first substep of Step 1 was to list the perceived opportunities and the individuals who perceived them. According to the MTD, the perceived opportunity at MSC was to have a training department that was better targeted to training needs identified for midlevel and sales managers. The MTD believed that these opportunities were perceived by the President of MSC, the VPHR, and himself.

The second substep was to identify the organization's or work group's products. The MTD said that the needs assessment would focus on the five products that the company produces.

The third substep was to identify the client. The MTD identified himself, the VPHR, the President of MSC, and the other executives of the organization as clients.[30] Then the MTD said that the primary client was MSC's President. The other executives were not in a position to accept the needs assessment, but they were in a position to support or challenge it for their work groups.[31]

The fourth substep was to analyze the information. Analysis was occurring during the entire interview, and no special analysis was done at this step.

The fifth substep was to identify which of the perceived opportunities were related to the organization's bottom line. The MTD stated that management training should include management and sales management training. He said that both were related to the organization's bottom line.

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[30] Decision maker characteristics: For the needs assessment project, three decision makers were identified, the President, the VPHR, and the MTD. The primary decision maker was the President.

[31] Organization politics: These comments show that the MTD was aware of who had the power at MSC, and that the person who had the power to accept the work was the key person to consider, but that others also had power, particularly when their power was combined.

The sixth substep was to analyze the information. Again, analysis was part of the entire interview rather than a separate activity that took place within a discrete step.

The seventh substep was to determine how the perceived opportunities related to the bottom line. The MTD responded to this question by stating that better managers led to more productive departments because the people who are supervised by trained managers are more productive and there is less turnover. The increased productivity and the decreased turnover can be measured in dollars and cents. The Analyst commented that she had not heard the MTD point out a specific current organizational concern/problem that needed to be addressed by the training. The MTD responded that the reorganization indicated a problem. Beyond that, he was convinced that some of the new managers did not have the knowledge and skills needed to be leaders in their jobs.

Phase 1, Step 2, focused on the purposes and parameters of the analysis. Step 2a consisted of a table that was used to identify the salient characteristics of the organization, the decision maker, and the Analyst.

The first category listed on the table was organization characteristics. The first characteristic—culture—included the following: climate for training; support for the training function; history of training in the organization; location of the training function in the organization; organization goals; organization philosophy, emphasis, and objectives; values promoted by the organization; amount of consensus/conflict within the organization; legal, social, economic and political factors inside and outside the organization.

According to the MTD, the organization's goals were outlined in MSC's strategic plan. He had not yet read the plan because he had requested a copy of MSC's strategic plan for the Analyst and he had then passed it along before taking the opportunity to read it.[32]

The MTD commented that he had heard that MSC was picking up new technology by acquiring new companies, that they were working on new products similar to ones currently being offered, and that they were also beginning to branch out into other areas.[33]

According to the MTD, the company was interested in addressing real problems now and in looking toward the future. The company was not interested in making things nicer right now.

In this organization, people had been hired and promoted because of their technological expertise but without considering their management skills. Whenever technology changed, MSC went outside the organization to gain that expertise.[34]

The philosophy of the company was that it respected people and wanted them to meet their objectives. Management worked with written objectives, and because they paid well, they had good people.[35] MSC's management wanted good people working for the company; at the same time, they expected the people to produce. Within the company there was a real focus on performance: "You set a goal and you meet the goal." When a goal was set, it was put in black and white, and now the decision makers wanted to move even further towards a performance orientation. For example, they were currently working on a pay-for-performance project.[36]

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[32] Decision maker characteristics: This comment provided a clue about the decision maker's style. Clearly, hooking training into the organization's strategic goals had not been paramount to him.

[33] Organization system: The changes mentioned here would be expected to change in some ways the organization's internal environment and its external environment.

[34] Organization culture: The culture of the organization had been to focus on buying the needed skills rather than training current employees.

[35] Decision maker characteristics: The perceptions of the MTD seemed to be consistent with the perceptions of the VPHR about MSC's management holding people accountable.

In the past, the company had also held the philosophy that quantity was more important than either quality or cost. For example, management looked at volume, and only recently had they begun to look at cost per item or revenue. Timeliness was also important, partly because managers at MSC had a good understanding of the importance of managing the level of float in a financial business. Managing the float level became more important when the banking regulations changed.[37]

The MTD was not sure about the organization's objectives because they were listed in the organization's strategic plan and he had not read it. He thought that MSC management's current emphasis was on getting new programs going and on increasing product sales.

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[36] Organization culture: According to the MTD, there was a strong culture related to performance and goals.

[37] Organization culture, system: The philosophy that quantity is more important than quality or cost is a cultural issue. The comment about the change in banking regulations influencing the perceived importance of timeliness demonstrates how a change in the external regulatory system caused the culture of the organization to change.

The MTD said that the values promoted by the organization included trustworthiness, integrity, and quality.[38] The MTD also stated, "We give the client what we tell them we will; we provide a real benefit to their organization and to their bottom line. That's where we make our money and they make their money and everybody is happy."

When asked about legal, social, economic, or political factors in the organization and in the environment, the MTD identified the Federal Reserve System. That organization was changing its rules and regulations, which was having a major impact on MSC. The MTD again said that some people who held high positions in MSC had not developed the competencies necessary to become real leaders in their positions; consequently, their followers were skeptical of them and commitment was not strong.[39]

The climate for training in the company was viewed as good. Training had been around for about 5 years. The current Manager of Training and Development was the third person in his position. The first person had run a one-person operation. The second person had held the position for about a year and had supervised one additional staff member. The current MTD had two people reporting to him and a budget that had quadrupled in the past year. The MTD reported to the VPHR, who was one level removed from the President. The MTD had access to all the vice presidents in the company. People in the company were interested in training. Attendance at most training programs ranged from good to very good.[40]

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[38] Decision maker characteristics: This comment is not consistent with an earlier comment about quantity and cost being more important than quality.

[39] Organization system: The comments in this paragraph highlight the fact that the organization was adapting to major changes in both the internal and external environment.

The reward structure of the organization was described by the MTD as including tangible, specific rewards as well as rewards just for being a member of the organization. For managers, the incentive structure offered specific, tangible rewards, service awards, and merit increases. Theoretically, merit increases were based on performance, but according to the MTD, these increases were not always based on objective measures. Some of the rewards that were not person specific included department potlucks, service awards, jeans day, employee appreciation day, and the company picnic.[41]

When asked about the amount of conflict/consensus within the organization, the MTD said that there were definitely "personalities" in the company, but that everyone worked to get along. As a result of the reorganization, many people were trying to figure out what they were supposed to be doing and how they related to other executives and how their functions had changed. The MTD was not aware of any conflicts between departments right now.[42]

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[40] Organization culture: Training's position in the company, the good attendance in programs, and the increase in staff would indicate that training is valued at MSC.

[41] Organization culture: According to the MTD, MSC rewarded performance and also membership in the company.

[42] Organization politics; decision maker characteristics; analyst characteristics: Based on the Analyst's understanding of organization politics, this comment was not accurate. Unless it was a highly unusual company, she expected to uncover some conflict. The MTD's comments

The reorganization had resulted in some major changes. Specifically, the position of Vice President of Sales and Marketing was eliminated, and the person who had filled that position was moved to a new position, that of Senior Vice President. The Vice President of Marketing began reporting directly to the President, and the Vice President of Sales and Marketing began reporting to the Senior Vice President.[43]

According to the MTD, part of the problem that the company faced at this time was that the consultant who had been hired to do the reorganization had handed the decision makers the reorganization plan, picked up his check, and walked out. There had been no maintenance of the reorganization until 3 weeks ago, when a new consulting group had been hired to work with the executives to accomplish additional organizational change. The MTD did not know the name of this consulting group.[44]

There was some frustration in the organization that things were not moving fast enough and not going in the right direction. The MTD perceived that the frustration was a grass roots perspective. He thought that the people at

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indicated either that he was unperceptive about the organization, that he was unwilling to share this information with the Analyst, or that the Analyst's model was wrong.

[43] Organization system: These comments highlighted specific structural changes that will affect the interdependencies of the work groups.

[44] Organization system, culture; decision maker characteristics: It was interesting that the MTD had not tied the training needs assessment into the work being done by the management consultants, especially when he perceived that some executives needed training. His reasons may have included a lack of awareness or a lack of power needed to connect a proposal for the training needs assessment to the other organizational change work.

the top of the organization were impatient because the numbers were not being generated, while the people below, who had to support the numbers, were not getting the information that they needed to do their job.[45]

To gain the capacity to respond to the changes in the external environment, the company had recently acquired another company that provided a similar service but used new technology. The MTD also indicated that the company's market niche had become pretty well established.[46]

The MTD could not think of any broader programs that were being instituted in the organization. But he did perceive some political factors surrounding the situation. He thought that when executives read the list of competencies that would be identified in the needs assessment, they might feel threatened because they might not have the skills and "we would have to let them know that gaining new skills is good and developmental." The Analyst commented that maybe managers higher in the organization would identify training needs for their subordinates, or maybe the managers would identify their own needs as part of the needs assessment. The MTD thought that those were good ideas.[47] The MTD also mentioned two problematic areas of the company: one that had open wounds because a lot of money had been spent and it had not been profitable, and one in which the manager did not get along with the VPHR because she did not believe in developing her people.

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[45] Organization system: This comment reflected the interdependencies among groups within MSC.

[46] Organization system: These comments highlighted additional changes in the external environment and how MSC chose to adapt to the changes.

[47] Analyst characteristics: The "we" in this comment put a lot of weight on the Analyst because, although she understood the importance of communicating the performance needs, she also knew that the tone of the words chosen by the MTD communicated that the Analyst and the training manager were evaluating management performance. This seemed to the Analyst to be

"Supporting systems" and "other" on the PAT worksheet were not salient characteristics at MSC.

The next step was to review the Analyst's characteristics. The Analyst was an external consultant. The disadvantage of not knowing the organization was balanced by the advantage of being able to perceive cultural issues that others in the organization might not see. The Analyst and the MTD discussed how the external person is often most effective when working closely with an internal person. The MTD agreed that he and the Analyst should work closely together on this project.[48]

The Analyst's biases included gathering data related to performance. The skill level of the Analyst was also discussed. The Analyst had experience in conducting needs assessments, but she said that experience should not be equated with skill. The MTD responded that he already knew her skill and that was why he hired her.

The Analyst's power came from expertise and whatever charisma she could bring to bear on the situation. The Analyst had some legitimate power by

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less effective than helping managers higher in the organization identify training needs for their subordinates or helping the managers identify their own training needs. From previous work with the MTD, the Analyst knew that in the actual situation, the MTD would follow her lead.

[48] Analyst characteristics: This paragraph contained the Analyst characteristics that were discussed. Because the Analyst and the MTD had previously worked together, they already knew something about each other's styles, biases, values, etc.

association with the training department, but legitimate power could be increased through working with the President of MSC. The Analyst's style was to work in collaboration with decision makers to implement the needs assessment.

Other characteristics of the Analyst included a belief in using training only for opportunities that required a change in knowledge, skills, or attitudes to meet the performance goals of the company. The Analyst also believed in using cost-benefit analysis to examine the economic worth of training options.

The Analyst then reviewed decision maker characteristics. The MTD said that the decision makers for the needs assessment project were the President, the VPHR, and himself. The MTD thought that the perceptions of the VPHR were similar to his and that the President had supported training efforts in the past.

The other executives in the organization are "influencers" because they could veto something for their area. If a number of executives vetoed the training, then the whole training project would be cancelled. Each of the influencers supported training in varying amounts.

The MTD perceived that there was considerable agreement among the decision makers but not unanimity. He said that any lack of consensus was more the result of not knowing because of the reorganization than the result of conflict.

The decision makers' biases about information were toward the factual and the logical. The decision makers had long experience with the organization, and they had the legitimate power that came with their positions. The decision makers also had power to reward and power to punish. The decision makers were not experienced in working with a training needs assessment.[49]

In Step 2b, the information that had been gathered in Steps 1 and 2a was used to determine the purpose and parameters of the Performance Analysis for Training. The purpose of the assessment was to identify the training needs of managers. The sales group was completely separate from the corporate managers, so it was agreed that the managers would be treated as two separate groups requiring two separate needs assessments. The initial needs assessment would focus on the managers at the corporate office. The reason for this choice was that much of the reorganization efforts had involved the sales force and that the MTD thought that management did not have a clear idea at the time about the structure of the sales operation.[50]

The MTD said that some executives at MSC needed training but that he was not in a position to point this out to them. He hoped that by starting with managers' needs for training, some executives would recognize their own need for training and so the identification of executive and supervisor training needs might be secondary products of the needs assessment.

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[49] Decision maker characteristics, organization rhetoric: This section included repeats of some comments made earlier, but provided information about how decision makers wanted information communicated and about the decision makers' lack of experience with a training needs assessment.

[50] Interaction between organization system and training needs assessment: The decision not to determine the sales needs for training was based on the fact that the structural changes in that subsystem had not been completed.

The MTD decided that the needs assessment would focus on future needs at MSC.

It was decided that the data gathering for the needs assessment would initially include review of organization records, observations, and interviews. In addition to financially supporting the project, MSC would provide typing and copying services, access to people, and other support as needed.

In discussing the boundary for the assessment, the MTD wanted to focus on management and middle management training and did not want the Analyst to promise confidentiality or make any other concessions unless it became an issue.

The MTD wanted the final report at the organizational level to include a summary of what the process had been, the needs that had been identified and prioritized, and the recommendations. The recommendations would include two or three options for each training need. There would be two reports: a written report and a verbal report. The reports would be reviewed in a meeting with the MTD, the VPHR, and the President. Before sharing the information with the other executives in the company, the MTD, the Analyst, and the President of the company would plan the next steps in the process. The importance of getting agreement, or buy-in, from the other decision makers was discussed.

The next step of the PAT Model was to gather information about the potential opportunities/needs. The Analyst pointed out that she had already reviewed some written materials. She suggested interviewing some of the decision makers in the company—especially the President. The MTD suggested meeting with the VPHR to identify the people to be interviewed. The MTD indicated that he would be out of town the following week and that it was acceptable for the Analyst to meet with the VPHR and, based on his recommendation, to meet with President. He also indicated that his preference was to be at the meeting with the President.

The MTD arranged to have an employment specialist provide a tour of the operation for the Analyst.

Event 7: Tour of Money Systems Company corporate headquarters to observe how work got done at MSC and to learn the messages given to new employees about the company.

Date: July 24, 1989.

Location: MSC's corporate offices.

Participants: An MSC employment specialist and the Analyst.

An employment specialist, whose job was to interview people for MSC positions, gave the Analyst a tour similar to the tours that she gave to people who were being considered for employment. The tour did not include the executive or staff offices. The Employment Specialist explained MSC's products and services and how each product and service was used by the customer. This explanation clarified what MSC's services actually were, and the Analyst commented on it. The employment specialist said that she had interviewed a lot of people for jobs with the company and that her experience was that many of them did not understand the company's products, even after they had read the promotional materials. She also explained that the company's products were not something concrete—like a car or a table—that you could touch.

The Employment Specialist described how products were processed through the company, and she pointed out where the various work groups were located within the building. At one point during the tour, it became clear that the processing of products was not a linear step-by-step process. Some of the steps were repeated for some of the products.

The Employment Specialist also explained how MSC had gone through several phases since she had begun working for the company. About 5 years ago, the company had employed about 750 people. Currently, the company employed 1,100 people. The growth was the result of a growing market, which, in turn, caused MSC to need more people to get the work done on time.

According to the Employment Specialist, after MSC got to a nice staffing level, the company began to examine the system for getting work done. They changed a few things and upgraded a few things. Then the company began to look at productivity to identify improvements. About 1986, they brought in a consulting firm and implemented a productivity program in the operations area similar to a time-and-motion study. The program took 2-1/2 years to implement. There was no quality component to the productivity program because each department had its own quality standards.

After the productivity program was implemented, the company began to examine itself as a total unit and to make some major organization changes. Some changes were currently being implemented. As examples of these changes, the Employment Specialist said that a quality program was being considered for implementation in the operations area. The Employment Specialist also said that a career development program was being implemented in one area at MSC. The Employment Specialist, who had a major role in implementing the program, expected it to spread to other areas in the company. She stated that without a career development program in an area such as information services, the company loses people with key skills because "people with those kind of skills just won't stay around without career development programs."

At two different times during the tour, the Employment Specialist used jargon which had to be interpreted for the Analyst.[51] The word *control* in this organization referred to security and also to process control, and the word *operations* referred most often to the area where products were processed. But in some cases operations referred to the computer operations area.

After the tour, the Employment Specialist gave the Analyst a brochure that showed MSC's floor plans, the department names, and the responsibilities for each department.

The Analyst asked the Employment Specialist about how the terms *manager* and *supervisor* were used at MSC. The Employment Specialist said that the terms described specific grade levels, and she pulled out a chart to check. According to the chart, Level 9 was one level below supervisor and Level 15 was a middle management level. In this organization, the person who was responsible for a department or work group was called a supervisor and a midlevel manager was the supervisor's boss. The Employment Specialist then looked up the number of midlevel managers in the organization. There were 38 people with the word *manager* in their title, 36 people with the word *supervisor* in their title, 11 people at the staff level that might be at the middle management level, 4 with the title of *director* (the level above manager) , and 11 with the title of *senior executive*.[52]

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[51] Organization culture, analyst characteristics: The fact that the words had to be interpreted for the Analyst was a clue that she was an outsider to the culture.

[52] Organization culture: The terms *manager* and *supervisor* had specific meanings at MSC. Knowing this information was important for identifying management training needs at MSC. An incorrect definition of management could have resulted in identifying needs of the wrong group.

The Analyst asked the Employment Specialist if she was aware of any training needs for midlevel managers. The Employment Specialist described the need for communication skills and said that sometimes communication was not "divulged" downward from the executive level. She said that "little things" were not divulged from the eighth floor—"sometimes little, tiny things that would have been no big deal in any other organization." Meanwhile, she said that much of the communication upward was in the form of complaints rather than productive suggestions. She sensed that these communication patterns were especially apparent after the recent reorganization and that people were feeling insecure. The Analyst asked what specific things made her think that people were feeling insecure. The Employment Specialist responded that it was a feeling, a tenseness around the offices, and the lack of laughter. When there was joking, it was of a different kind, more black humor and more tense.

The Employment Specialist said that, if possible, she would like to see the results of the needs assessment. The Analyst explained that she had agreed to share the results with the Manager of Training and Development and that the Employment Specialist might be able to get the results from the MTD.

In addition, the Employment Specialist identified the number of supervisors and managers at MSC. Her information seemed to show that MSC had more managers than supervisors.

Event 8: Meeting with the Vice President of Human Resources and the Manager of Training and Development to plan the next step of the needs assessment project.

Date: July 25, 1989.

Location: MSC's cafeteria.

Participants: The Manager of Training and Development (MTD), the Vice President of Human Resources (VPHR), and the Analyst.

After some small talk about the weather and the amount of traveling that the VPHR had recently had to do, the meeting began. The VPHR and the MTD waited for the Analyst to begin.[53] The Analyst said that the purpose of the meeting was to review what had been done and to plan the next step of the needs assessment project. The Analyst showed the VPHR the phases and steps of the PAT Model (see page 63). The VPHR said that it looked good, but he was leaning over the table and bending his head at an unusual angle to read it. He explained that he had forgotten to bring his eyeglasses.[54] So, the

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[53] Analyst characteristics; decision maker characteristics; organization rhetoric: This situation felt a little odd to the Analyst, and she recognized that she had expected the MTD to take more of a leadership role during this part of the meeting.

[54] Analyst characteristics; decision maker characteristics; organization rhetoric: The Analyst had tried to use the phases and steps of the PAT Model as a rhetorical tool. It was supposed to communicate to the VPHR that she was using a logical, thoughtful process for determining MSC's training needs. But the visual representation of the process lost its usefulness as a rhetorical tool when the decision maker has to squint and hold it at an angle to read it. So the Analyst verbally explained the purpose of each phase.

Analyst explained the purpose of each phase of the PAT Model. For example, the purpose of Phase 1 was to determine where in the organization (or work group) the training emphasis should be placed. The Analyst explained that she and the MTD had been working on Phase 1, Steps 1 and 2, and the decisions made at those steps should be reviewed before moving on to Step 3.

The Analyst listed the written materials that she had reviewed. She then commented that none of the current training programs that she had reviewed had focused specifically on the knowledge, skills, and attitudes needed in a financial organization. For example, there were no programs on managing the float or understanding the financial regulations. Instead, the written training materials focused on generic management skills. In addition, she had gotten the impression that the company seemed to be ready to grow, expand, and look to the future rather than being in a position where there was a current burning need concerning the products that had been offered for a number of years. The VPHR bristled at the words "current burning need."[55]

The VPHR indicated that a burning need for the company was to decrease reaction time to changes in business needs. He stated, for example, that he was "disgusted that the company had had two new products developed and was waiting until September to introduce the products because they needed to train the sales people on the products." The decision had been made to train the sales force on the new products at a time when it would coincide with other planned training for the sales force. The VPHR angrily asked the Analyst if she had *ever* heard of a company that had waited for 2 months before introducing new products for this reason. The Analyst responded, "So the new products are ready to go now, but the sales force needs to be trained before they can sell the products?"[56] The VPHR further explained that in 2 months, all the sales force from across the country would be flown to a central site for an annual meeting that included some training sessions. He believed that the sales force should have been trained on the new product immediately so that they could begin selling it. The VPHR felt that the company could lose hundreds of thousands of dollars by waiting and even more if the competition beat them to the marketplace with a similar product.[57]

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[55] Analyst characteristics; organization rhetoric; decision maker characteristics: The Analyst's choice of words had not impressed the decision maker in the way she had expected.

The group then discussed the purposes and parameters of the Performance Analysis for Training Model. The focus of the project would be on management training. The VPHR asked the Analyst and the MTD if they were shying away from conducting a sales training needs assessment. The MTD responded that this needs assessment and the sales needs assessment that was currently being done would be modified to identify the training needs of sales managers.[58]

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[56] Analyst characteristics; organization rhetoric: To the Analyst, it seemed prudent not to answer the VPHR's question. The Analyst felt that her answer could have been used as an influencer in the organization ("For example, the training expert said. . . ") and she did not know enough about the situation or the VPHR to make this response.

[57] Organization system: The comments by the VPHR highlighted the interconnection among the sales department, sales training, and the new product development areas of the company. New product sales training was also connected to the marketplace.

[58] Decision maker characteristics; analyst characteristics; organization rhetoric, politics : The Analyst and the MTD had talked about doing a sales training needs assessment, but the Analyst

The VPHR explained to the Analyst that he had a real need for sales managers to act like sales managers.[59] The Analyst asked why he thought they were not acting like sales mangers. The VPHR responded that the sales managers sat in their offices all day drinking coffee. The Analyst asked the VPHR if he thought this was a training issue or a culture issue. The VPHR listed the following reasons for the coffee drinking: (a) they don't know what jobs they are supposed to be doing, (b) the job has always been done this way, and (c) company tradition.[60]

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had not recorded any conversation about modifying this needs assessment or combining it with the sales training needs assessment. She wondered if she had misunderstood the previous communication, or if the MTD was using different language with the VPHR.

[59] Interaction among the decision maker characteristics, the analyst characteristics, the organization politics, and the needs assessment process: The Analyst wondered how much authority the VPHR had for making this statement about sales. In the Analyst's experience with organizations, human resources was a staff function rather than a line function. In some organizations, the words used by the VPHR could be considered fighting words to the person who managed the sales force. The VPHR's words made the Analyst realize that she needed more information about the politics in this company.

[60] Organization culture: It sounded like the real cause for the behavior of the sales managers was the culture. They were acting in the way that they had always acted. The comments by the VPHR raised questions about whether decision makers in the company had determined new behaviors for the sales managers. More information would have to be gathered before a determination could be made about whether this was a real need and whether it required a training or a management solution.

The conversation then shifted to talk about data processors and how data processing work seldom got done on time. The VPHR had a real concern about whether the information services department was competent.[61] He stated, "Managing projects is the issue. Whenever we have a project, it isn't done for at least a year beyond schedule."[62]

The conversation returned to management training. The VPHR commented that there were three current management development options: initial supervisory training, management training, and outside training. There was also an executive development program offered by Prine, Inc. The VPHR then told a long story about Prine's training program. "There is a waiting list for that program. It is very good. Everybody is talking about it," the VPHR said. "The program is delivered by some university professors."

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[61] Organization culture, rhetoric: Apparently, it is culturally acceptable at MSC to question competency. The word *competency* had also been used by the MTD in an earlier meeting.

[62] Interaction of decision maker characteristics, analyst characteristics, organization characteristics, and needs assessment process: At this point in the conversation, the Analyst began to question the VPHR's purpose in communicating this information. The VPHR described a performance problem. He also communicated that the probable cause of the performance problem was lack of competency. The Analyst felt that the VPHR was also trying to bias her perception and that he was communicating a limiting parameter for the needs analysis. Because the VPHR had communicated that he had already formed an opinion about the information services area, the Analyst perceived that any information resulting from the need analysis that did not support this position would be questioned. This perception made interviewing MSC's president even more paramount.

Next, the VPHR asked the MTD to let him know, in advance of future meetings, what the agenda would be and how long we should meet. The VPHR was concerned that he would not be able to respond to the Analyst's questions in a short time. The Analyst suggest that the real issue for the meeting was that she and the MTD had talked about concentrating the needs assessment on MSC's future training needs. She noted that the VPHR had talked about some current needs, including communication, sales manager training, and performance in the information services area. She further noted that he had discussed some needs that could be addressed with training solutions and some needs that required other kinds of solutions.

The VPHR responded to the Analyst's comments by saying that he understood what she was saying about courses for managing a financial institution. He noted that when he dealt with personnel, the problems were the same regardless of the institution that he was in. "A financial-processing institution is the same as manufacturing, which is the same as government." He said that he had worked in all those institutions, and then he said, "Things are different in this organization. For example, normally the cost to produce an item goes down based on the number of items that are produced. But in this organization, if they get a big contract, the price per item does not go down."[63] The VPHR said he didn't know how they measured effectiveness at MSC. The

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[63] Interaction between decision maker characteristics and analyst characteristics: It was difficult for the Analyst to communicate with the VPHR. It seemed that he did not answer questions, that he jumped around in the conversation, and that he did not like a number of things. The Analyst was not sure if the problems in the communication were a function of her style or the VPHR's style or if it was just a bad day for both.

Analyst commented that according to the written documents, effectiveness was being measured in two ways, profits and volume. The VPHR agreed that both measures were important, but noted that "when push comes to shove, profits are the important measure."

The VPHR then suggested that the Analyst talk to the Vice President for Corporate Development, the Vice President of Marketing, the Manager of Operations, the Vice President of Sales, and the Vice President of Information Services about the training needs. Later, the Analyst could meet with the President of MSC, the Vice President for Finance, and a regional manager.[64] The MTD commented that the Sales Trainer and the Training and Development Specialist should also be interviewed.

The VPHR noted that both the Vice President for Sales and the Senior Vice President had been "born with the company."[65] The Analyst asked if she could also talk with him, the VPHR, about the training needs that he perceived. His response was to wonder why the Analyst would ask him for information about the training needs: "After all, I hired you to do the needs assessment, so why don't you just go out and find the needs."[66] The Analyst then explained that some people who do training needs assessments work the way he described, and some come up with the answers without ever visiting the company. On the other hand, some people come on site without any firm ideas, and whatever the decision makers say they want is what they are told they need. The Analyst believed that instead of those options, they could work together to identify performance needs. The VPHR responded that it was dangerous to get only his opinion about what the needs are.

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[64] Organization politics: The VPHR had the power to stop the project by not identifying the names of people to be interviewed,but he did not do that.

[65] Organization culture: Two of the senior people had been "born with the company."

[66] Interaction of decision maker characteristics, analyst characteristics, and organization rhetoric: The Analyst recognized that this was a potential lose-lose situation for her. If she asked the VPHR, he did not like it, and if she had failed to ask him, he would not like it. The Analyst responded by reminding the VPHR that the purpose of the project was to look for a performance need that could be addressed with training. This communication was rhetorical.

There was then some discussion about whether it was more important to address sales managers' needs first or the midlevel managers' needs first. The VPHR left the meeting before the question was answered.[67]

After the VPHR left, the MTD and the Analyst talked briefly. The Analyst asked the MTD what he thought had happened. The MTD suggested that the meeting might have gotten off to a bad start because there was too much information too fast. Also, the VPHR didn't have his glasses. They concluded that the PAT Model worksheet had been useful in focusing the conversation. The Analyst said that she would have to think about the interaction for awhile.

The MTD and the Analyst discussed whether it was better to begin the analysis at corporate headquarters or in the regions. The MTD's rationale for beginning the analysis at corporate was that the two of them could get their act together here before taking the show on the road. He also believed that it would be easier to manage change at corporate than it would be to manage it in the six regional offices. The Analyst's rationale for beginning at corporate was that she still had some unresolved questions about how the company was structured. Each region interacted with corporate and it sounded like a lot of the decisions were made at corporate. If the power in the organization was at corporate, it seemed to make sense to start at corporate before going out to each of the regions.[68]

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[67] Decision maker characteristics; organization rhetoric: The VPHR did not answer many of the questions or make decisions related to the project. The MTD had already made this decision, but it was being remade.

The Analyst and the MTD then discussed some of the questions that would be appropriate for interviewing people at MSC. It was decided to focus most questions on training and performance. The MTD commented that the Vice President of Product Development could pull people toward certain preferred directions. He also noted that three of the people who would be interviewed were on the New Product Committee at MSC. They were the Vice President of New Products, the Vice President of Marketing, and the President of the company.

The Analyst asked for feedback on the format that she was thinking of using for the interviews.[69] Her format was as follows: She would introduce herself and offer a business card. She would then explain that the purpose of the needs assessment was to identify the performance needs or the opportunities at MSC that could be addressed with training. The Analyst would then explain the phases and steps of the PAT Model. She would then ask the following questions:

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[68] Decision maker characteristics; analyst characteristics: This discussion highlighted a difference in the perspectives of the MTD and the Analyst. The Analyst wanted to find out where the power was and to get connected to the key decision makers. The Analyst had a good hunch that she would find the key decision makers at corporate, not in the regional offices.

[69] Analyst characteristic; organization culture, rhetoric: The Analyst wanted the MTD to own what was happening, and she also wanted verification that the questions would be appropriate for this organization.

1. What are the needs or opportunities that the organization has now or will have in the future?

2. Which needs should be addressed with training solutions?

3. What are the changes in the industry?

4. What knowledge, skills, or attitudes would his or her people need?

5. What knowledge skills, or attitudes would managers need?

6. How would providing that training affect the organization's bottom line?

7. Were the managers in the department currently using training? How? What worked and what didn't?.

8. Were there knowledge, skills, or attitudes within his or her area of specialty that managers in other departments should know?

9. In planning future training courses, was there anything else the Analyst should know?

10. Are there other managers with whom the Analyst should talk?

The MTD said that the format and the questions seemed appropriate "for the information that we are after and for the people who were being interviewed."

Event 9: Interview with the Sales Trainer to learn about sales training.

Date: July 25, 1989.

Location: MSC employment specialist's office.

Participants: The Sales Trainer (ST) and the Analyst.

The Analyst saw the Sales Trainer in the hall of the human resource area and asked if she could set up an appointment for an interview. The ST said, "Sure, we could meet right now." The ST and the Analyst went into an office that belonged to one of the employment specialists. The ST commented that she didn't really have an office. When she was hired, a partial cubicle had been put up next to the photocopy machine. When the machine ran, she couldn't hear anything else. Also, the cubical was located across from the secretary's desk and close to the office of the VPHR. It was hard for her to concentrate when she was in that space. Consequently, when someone was absent, she appropriated their office for the day.[70]

The Analyst explained the purpose of the needs assessment. She also showed the ST the phases and steps of the PAT Model. The Analyst then asked, "What are the current knowledge, skill, and attitude needs at MSC?" The ST responded that the Vice President of Sales needed anything and everything. She added, "He has no logical system for telling his people this is what we have, or this is where we are going." She noted, for example, that the VPS had set the product training for June 26 and then, for no apparent reason, changed it to July 7. She said, "There is no system for training. The sales people get the same message. For example, there is no prioritization between customer service and market penetration."[71]

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[70] Organization politics: This is an example of the resources that had been allocated to the training department.

The ST said that at the current time there was no sales training program. There was the PAIRS program but it was just done for the retail people. The last time that it was taught, it was delivered by "a rep in the field," but there was no training on the financial side. The rep gave them (the retail people) a version of "This is the way we do it—it is my way, but do it this way." He was somewhat arbitrary.

The Analyst asked what kind of training the sales people currently received. The ST answered that all the sales people currently attended a training program offered by an external vendor on key-account management, but she noted that the program didn't match the needs of the people in retail sales. The ST continued, "There is hit-and-miss reinforcement in the field to support the skills learned in the training. Like Jello-on-the-wall, some of it sticks and some doesn't.[72] Something is better than nothing. We are finding that we need to do sales training at the sales manager and director level." She also stated that unless the VPS said it had to be, then it didn't get done.[73]

The Analyst asked about the regions. The ST responded that the managers in the regions felt that it was their job to protect their people. She said that she had heard through her grapevine that the regions would probably be combined in the future.[74] She added that there were sales managers with only six people reporting to them.

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[71] Organization culture: This may be an example of the organization's culture or it may be an example of the sales trainer's perception.

[72] Organization rhetoric: This analogy was an effective rhetorical tool. The Analyst smiled at the humor and wanted to believe that the communication was true.

[73] Organization culture: This sentence would point to a hierarchical organization or to the power of the Vice President of Sales.

She also commented that there was a "good-old-boy" network at MSC—the regions ran the way they wanted, and the managers protected their people. "That was OK as long as there were record years, but now they need to change." The VPS had been around for more than 10 years. He had been a regional manager and had been appointed VPS in February 1989. She said, "He is impulsive, and there is a serious lack of direction." She commented that if the Analyst were to interview the VPS, she should ask, "Where is the sales focus? What is the focus? What are the training needs?"[75]

The ST also commented that "the organization doesn't use any demographic information and they do not have any standards for their people. There are no quotas, so there is no estimation of how much a top person sells. The region has quotas, but they are not broken down by monthly goals. The VP of Sales is harder to work with because there is a battle between sales and HR. There is no communication between sales and HR." Apparently, sales was threatened when the Human Resource Department hired the sales trainer because sales was protective of its turf. "As a result," the ST commented, "there probably won't be any sales training included in the director's meeting."[76]

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[74] Organization culture: This communication pointed up that a network for sharing information existed in this organization.

[75] Interaction of needs assessment, organization politics, and analyst characteristics: The Sales Trainer desired to use the needs assessment project for her benefit. She wanted the Analyst to ask questions that were important to the Sales Trainer. The Analyst recognized what was happening and knew that if the needs assessment were used in this way, it would be ineffective.

The Analyst asked the ST how long she had been working at MSC. She answered that she had been there since the end of November 1988. She also mentioned that a previous training manager was currently working at MSC's North Central region office.

The Analyst asked specifically what sales training was accomplished in the last year. The Analyst responded that the Key Accounts Strategy Training was held, but the sales managers' meeting had been cancelled, and the product training had not been done yet.[77]

The ST also said, "There is competition between sales and marketing. Marketing sells. They compete with sales. The Vice President of Marketing is not highly thought of in the regions. It is not uncommon for marketing to blanket a region. The regional manager would later meet with a customer and find that marketing had already been there and be embarrassed and surprised."[78]

The ST also said, "There is competition between the financial and retail side of sales."[79] The Analyst explored this point by asking how the regions were set up. The ST responded that the VPS, who reported to the Senior Vice President, was in charge of all the sales. Each of the six regional directors reported to the VPS. Two groups of sales people reported to each director, the financial group and the retail group. The financial group included account executives who reported to sales managers who reported to the regional director. The retail group included agency supervisors, who reported to retail managers, who reported to the regional director. The account executives sold to customers, while the agency supervisors sold to agents.

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[76] Organization culture, system: This paragraph provides a clue about the organization's culture related to sales performance and competition among departments.

[77] Organization culture: There seems to be a pattern of not implementing planned training programs.

[78] Organization system, culture: This is another example of competition among subgroups within the organization.

[79] Organization system, culture: This comment provides an example about organization competition.

The ST explained that the account executives and the agency supervisors had different cars, salaries, and performance standards. She provided the following examples: A recent sales contest was held for the account executives only, the sales managers' bonuses are based on the sales of their people, the retail managers' bonuses are based on volume. She also described how the agency supervisors had had to pay back their bonuses the past 2 years because the bonuses had been miscalculated. Sometimes, to increase volume, the agency supervisors lowered the selling price of the product.

The ST said, "All the directors report to the VPS. The VPS reports to the Senior Vice President, who has no sales background. The SrVP manages by saying, 'This is your job, do it.' He is an intelligent, hands-off manager and may not be around long. According to the grapevine, he was offered retirement with the hope that he wouldn't take it. If he can't get done what he wants to, he may not be around long." She also said that the SrVP had a somewhat better understanding and logical process than the Vice President of Sales. Then she added, "But not much better."[80]

The Analyst then asked, "Who pays for training?" The ST answered, "PAIRS was paid for by the sales area at national, but the regions foot the bill for other training—even for orientation training for new people. The sales area wants to have 10 to 12 people in training at a time, so they bring people in for training sometimes 1 year after the people have started to work. By this time, the new people already know how to calculate float, so there is little point in training."

The Analyst asked, "What are the rewards for performance?" The ST answered that for financial people the reward was bonuses and for retail people the reward was money based on volume. These seemed to be the only rewards.

The ST also said, "Sales training is done at the regional sales meetings at the discretion of the regional directors. Normally the regional meetings are done at the first of the year. Financial people are also brought in quarterly for one-half day maybe, but usually less." The ST stated that at their last regional meeting she had asked what training the regional sales people wanted. Subsequently, the VPS had spoken to the directors, and she learned that the requested training had been overridden by the need for product training for seven new products. The result had been no training. She also said, "The SrVP will sit on the VPS, if necessary."[81]

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[80] Organization politics, culture, system: The ST's description provided a perspective about the culture and politics within a subsystem of the organization, the sales area.

The Analyst asked how many people were in each region. The ST gave her the numbers and commented that the majority of the sales managers don't travel with their people.

The ST had heard the VPS say that sales managers should be training their people. The Sales Trainer wondered aloud how sales managers were being trained on how to train and what common skills they were giving to people. The ST said training varied by the region. It was usually done by peers, and there was little consistency within a region. She also said that there was not one consistent product installation in the regions. The Analyst asked how she knew that. The ST responded that when she was first hired, she had gone out to the regions and ridden around with the sales people. She also reported that to get a new customer, the account executive had to fill out 20 separate pieces of paper and send them back to corporate operations. If the account executive did not get a piece of paper signed, he or she would have to repeat the contact.[82] She also said sales training wouldn't help real good people sell junk.[83] Morale and motivation are low because the sales people are disillusioned with the new products. The ST continued, "On top of that, when the company acquired the new subsidiary, the sales force was told to leave the bigger accounts to the other company after a certain date. That was certainly not motivating to the sales force. The subsidiary people are supposed to train our people on their machines. But the two companies have been competitors for years, and the cultures do not mix. Is it any wonder that sales are off? Projects are not managed all the way through, and the field knows it."

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[81] Organization culture, politics: The Sales Trainer was teaching the Analyst about the organization's culture and who had the power.

[82] Organization system: In MSC's regional sales system, the lack of consistency in how to install a new product would be expected to influence performance. Also, the story about 20 pieces of paper being filled out for each new customer, it true, might indicate a lack of efficiency in the work system itself.

The ST then gave the Analyst her scoop on the vice presidents at MSC. She said, "The Vice President of Marketing will see you as a threat because of your being female; she is sarcastic and gives only what she wants to. Her group doesn't pay for training, except for interaction training." The ST then gave the Analyst the following advice: "Don't back down and be sure to act professional." The ST said that the Manager of Operations and the SrVP were in a network. As evidence of this, she noted that the Manager of Operations was in on all the sales directors meetings.[84] The SrVP had a lot of power in the organization. He positioned himself so he is not connected to a problem, but is connected to a solution.

The ST then said that the President was being pressured by Prine, Inc.: "He wants solutions and doesn't want to make decisions." She also noted that the President, the SrVP, and the regional directors were sensitive to the fact that they didn't have college degrees. The President was 42 years old and had been with the company 25 years.[85]

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[83] Organization system, culture: The analyst was beginning to get some additional clues about why the sales force might sit in the office drinking coffee.

[84] Organization culture: This inside scoop made the Analyst feel less like an outsider.

The Analyst asked if she could call the ST if she had additional questions. The ST responded, "Sure! With everything being cancelled, I don't have much work to do anyway."

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[85] Decision maker characteristics; analyst characteristics: The sensitivity of decision makers about the topic of education could be a potential issue for the Analyst, who was working toward her doctorate.

Event 10: Interview with the Training and Development Specialist to learn about training needs at Money Systems Company.

Date: July 25, 1989.

Location: The conference room ("fishbowl") at MSC.

Participants: The Training and Development Specialist (TDS) and the Analyst.

The TDS had developed and delivered most of the programs that the training department currently offered. She was sitting in the fishbowl alone. The Analyst waved from the lobby and then went into the room and asked if they could set up an appointment to talk about the needs assessment project. The TDS asked what the purpose of the needs assessment was, and the Analyst explained that a needs assessment was used to gain understanding about what the current or future training needs of an organization were. The Analyst then showed the TDS the phases and steps of the PAT Model that was being used to determine training needs at MSC. The Analyst said that the project was still at the organization analysis phase. The Analyst further stated that she was interested in the kinds of things the TDS was hearing people say they really needed and where she thought the organization was really going. The Analyst noted that the TDS was the person in the training department with the most contact with others in the organization.

The TDS was clearly agitated. She said that because of her experience with another intern, she was angry. She felt that the intern had not treated her with respect, and she felt that she had not been given the big picture about the needs assessment project. Furthermore, she said she didn't want to change so fast, and at the same time it was taking a lot of her time to meet with the interns.[86]

The Analyst apologized for not having shared the big picture about the needs assessment project before this and then added that she had just met with the VPHR and the MTD that afternoon to try to get a better handle on exactly what the big picture was.

The TDS described how the intern had shown a lack of respect for her. The Analyst responded that this was not supposed to happen and asked why she had not told the MTD. The TDS responded, "You don't know how it is around here. He wouldn't listen to me."[87] The Analyst responded by saying that she would like to tell the Director of the Training and Development Research Center what was happening because she was sure that he would listen. She was also sure that the intern's behavior would not be deemed acceptable.

The TDS then told about all the injustices she had experienced since the interns had arrived, and cried. After listening for about 10 minutes, the Analyst pointed out that only several of the events described by that the TDS had anything to do with lack of respect. Most of the items had to do with changes in the kind of training that would be done at MSC in the future and how performance would be measured.

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[86] Analyst characteristic: The Analyst recognized that the Training and Development Specialist had grouped a number of different occurrences. Some of her concerns could be easily addressed, but some of her concerns were based on the real changes that she was being expected to make.

[87] Organization culture: These comments and, in fact, the meeting reveal some lack of communication and trust within the training department.

The Analyst also explained that during on the meeting (Event 4) that they had all attended, the MTD had talked about training being performance based. Implementing performance-based training meant changing the criteria used to evaluate training. The TDS said that she did not understand the new criteria. The Analyst explained that her understanding was that in the past the courses had been evaluated based on satisfaction ratings, and in the future, they would be evaluated based on ratings of satisfaction, learning, and performance. Performance would soon be the most important evaluation measure. The TDS commented that in her performance reviews she was still rated on the number of days of training and on the satisfaction scores. The Analyst said that she could not fix everything, but she could explain the big picture of the needs assessment project and she could talk to the Director of the Training and Development Research Center about the lack of respect.[88] The TDS agreed that this would be helpful.

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[88] Analyst characteristics; organization rhetoric: The Analyst felt that she had not used the expected communication with the Training and Development Specialist. She felt that she had been expected to commiserate because both women were supposed to be powerless females. However, the Analyst did not see herself as a powerless female. Her message to the Training and Development Specialist was that some of her concerns could be easily addressed.

Event 11: Telephone call to the Director of the Training and Development Research Center.

Date: July 25, 1989.

Location: Telephone.

Participants: The Director of the Training and Development Research Center and the Analyst.

During the evening hours, the Analyst phoned the Director of the Training and Development Research Center to tell him about the Training Specialist's concerns. The Director listened and then asked some pointed questions to get clarification about the Analyst's understanding of what had happened and about what exactly the Training and Development Specialist felt. The Director stated that he was glad that the Analyst had called and that the Training and Development Specialist's concerns needed to be addressed. He commented that there were always a lot of issues around changing performance in an organization, but that lack of respect was a big deal in his book. He said that he would talk with the intern involved and with MSC's Manager of Training and Development so that this situation could be addressed as quickly as possible.

Event 12: Telephone calls to schedule interviews.

Date: July 31 to August 11, 1989.

Location: Telephone.

Participants: The interviewees, their secretaries, and the Analyst.

It required between 1 and 11 phone calls to set up each appointment. A letter had been sent by the MTD informing each person that the Analyst would be calling. The letter also stated the purpose of the call and the purpose of the interview. The Analyst informed each potential interviewee that she was doing a needs assessment for training. The Analyst asked if the person had received the letter, and most answered that they had not. The Analyst said that she would introduce herself on the spot, with the expectation that the letter of introduction would arrive shortly. The interviewees invariably laughed and responded positively. The Analyst explained that the goal of performance-based training was to provide the knowledge and skills that managers needed to do their work. She said, "To do that, we first have to start with the kind of work that the organization currently needs and will need in the future. The VPHR and the Manager of Training and Development suggested that I talk with you. Can we set a time to do that?"

Most of the Vice Presidents suggested a time, and several asked how much time would be needed. The Analyst said an hour, and a meeting time was set.

One Vice President explained that he was out of town a lot right now, that he would be in on Monday and Friday, and that he was wading through a ton of stuff this week. The Analyst said that she understood and asked if it was possible to meet for an hour one afternoon next week? He said, "Sure," and a meeting time was set [89]

The Vice President of Sales said that he had received the Analyst's phone message, but that he was ignoring it. The earliest time he could meet was 3 weeks in the future. The Analyst said that would be fine, and a meeting time was set.

The Manager of Operations was never available when the Analyst phoned and did not return phone calls. Messages were left on 10 separate occasions. On the 11th try, the person who answered the phone said that the Manager of Operations was on the other line and asked if she could have the Manager call the Analyst right back. The Analyst asked if instead she could be put on hold. In a few minutes, the Manager of Operations came on the line, and a meeting date was quickly set.[90]

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[89] Organization rhetoric, politics: analyst characteristics: If the Analyst had pushed the busy Vice President, he would have met with her on Monday or Friday, but by suggesting the following week, both parties' objectives were met—it was a win-win situation.

[90] Organization rhetoric, politics; analyst characteristics: The Analyst perceived that had she hung up, she would probably not have been called back. Asking to be put on hold was persuasive communication.

Event 13: Interview with the Vice President of Marketing to gather information for Phase 1.

Date: August 1, 1989.

Location: The office of the Vice President of Marketing.

Participants: The Vice President of Marketing (VPM) and the Analyst.

The Analyst was several minutes late for the meeting because the person who was on duty at MSC's reception area did not know who the Vice President of Marketing was. He also did not know the location of her office or her company phone number. To find this information, the Analyst had to call home and have a member of her family read the Vice President's phone number, then call the Vice President to find out where her office was.[91]

When the Analyst reached the correct floor, the VPM was standing by the elevator talking with several people about how sales had "screwed up something and how they had to move fast" to get something done. The VPM did not look understanding. When the Analyst and the VPM reached her office, she indicated that the Analyst should take one of two seats separated by a little round table. She sat in the other seat. The VPM sat with her leg crossed and her entire body positioned so that it faced away from the Analyst.[92] The Analyst introduced herself, and gave the Vice President a business card showing that the Analyst was a research assistant from the University of Minnesota, and explained that a needs assessment was being done and why her help was needed.

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[91] Organization system: The lack of interconnectedness between departments caused this problem.

[92] Organization rhetoric: The posture of the VPM was almost a classic body language pose. There was nothing subtle about her pose or her anger. Because the anger seemed to be out of proportion with a new receptionist not knowing her office location, the Analyst wondered if the VPM was also angry about the conversation at the elevator.

The VPM said that her managers needed skills in influence management because they worked with the product. They needed the kind of training that comes under the heading of communication and team-building training. She said, "My people forecast volume and bottom line. Everyday, they have to influence people. The people who have been with the company for a long time don't understand marketing. So what my people really need is more influence skills." The VPM had five mangers working for her. They worked to influence both the product teams and their individual contacts.

The VPM then said, "I don't believe in the value of training. Training is incestuous, and an overhead expense. It is a cost. And if any training is needed, people should get it from the outside so that they can get the outside influences."

The Analyst pointed out that the focus of the needs assessment project was on what knowledge, skills, and attitudes were needed by MSC employees. Only after information had been gathered about what was needed could decisions be made about how the training would be delivered. The Analyst also said that she "absolutely agreed with the VPM that a lot of training is fluff and does not improve a person's performance.[93] The Analyst said that in addition to fluff courses, she had seen some good training courses. The Analyst drew a graph with performance on one axis and time on the other axis and explained that somehow people have to learn new skills. The goal of training was to make the learning process as efficient as possible.

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[93] Analyst characteristics: The Analyst knew that to get information from the interview, she had to stop the flow of anger. Strongly agreeing with the Vice President of Marketing seemed to be the best way to do this—especially since the Analyst thought that the Vice President of Marketing was

The Analyst then asked the VPM if it would be easier if other managers knew about marketing. The VPM uncrossed her legs and turned slightly to face the Analyst. She answered, "Yes, then they would support marketing's decisions. For example, we are getting out of a market, not because of what the customer wants, but because of what the operations area wants."[94]

The Analyst asked where most decisions at MSC were made. The VPM said that they were made at the executive level. The Analyst asked if the lower levels were ever "out of sync" in carrying out the decisions. The VPM said, "No. The managers are told what to do, and they do it.[95] My line managers are product managers. They are responsible for profit and price." The marketing people researched products, identified problems, and identified the customer needs at a certain cost and profit. Sales was responsible for revenue and closing the sales. Marketing, sales, information services, and operations worked closely together. The VPM stated, "My people have enough information

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correct. The tactic worked. The words *absolutely agree* and *fluff* seemed to stop the anger of the Vice President of Marketing and to get her attention.

[94] Organization system: The issue was whether the factors outside the organization or inside the organization should have more influence in determining MSC's products. The VPM described how MSC balanced the forces inside the organization and the forces external to the organization in making decisions.

[95] Organization culture: This is an indicator of an authoritarian organization.

about the products that are delivered, so influence management is the only thing that they need. The junior marketing people go outside the company to get specific marketing training because there is no support within the company for marketing."

The Analyst asked how old the marketing department was. The VPM responded, "The department is 3 years old, and management doesn't encourage the process. For example, there is no new product development process. Also, anyone who has been with the company for a long time is not influenced by marketing."

The Analyst asked about whether her people were using training and what worked and what did not. The VPM responded, "An interpersonal program put on recently by the Training and Development Specialist was helpful, or rather interesting. I would like my people to have a week of interpersonal relations training, but they don't have the time."[96] The VPM also alluded to the culture of the organization getting in the way of things, but would not specify. The Analyst asked if she could talk with some of the marketing managers if additional information was needed. The VPM identified two people and said that the Analyst could call them and that she could say that the VPM had given their names.[97]

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[96] Decision maker characteristics: While the Vice President of Marketing said that her people needed influence skills, she also said that they did not have the time to take a course to develop those skills.

[97] Organization politics: The Vice President of Marketing seemed to be giving her approval and support for the Analyst to talk with others in her department.

The Analyst asked if she could call back if she had additional questions and the VPM answered yes.

Event 14: Meeting with the Manager of Training and Development to inform him about the meeting with the Vice President of Marketing.

Date: August 1, 1989.

Location: The office of the Manager of Training and Development.

Participants: The Manager of Training and Development (MTD) and the Analyst.

The Analyst met with the Manager of Training and Development immediately after the meeting with the Vice President of Marketing. The Analyst wanted to inform the MTD about how the meeting had gone, in case there were any political repercussions. The Analyst did not want the MTD to be surprised. The Analyst stated, "the VPM did not seem to value training and further she seemed to be angry throughout the meeting." The MTD was "happy to learn that the VPM did not really value training." He was glad that an external consultant had been at the meeting rather than himself. He also commented that the VPHR had told him that the SrVP had said that "He didn't think we have the right people in marketing."[98] The Analyst asked why they thought that the wrong people were in marketing. The MTD answered, "There is a lack of market analysis." He suggested asking the SrVP, "What has marketing done to help them and where is pricing done?" The MTD thought that pricing was done by sales including the regional director, sales manager, and VPS.[99]

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[98] Organization politics, rhetoric: A phrase used by a person at an upper position in the hierarchy had been communicated though an informal network. The Analyst perceived that because of this communication, the less-than-positive meeting was acceptable to the MTD.

The Analyst said that her next meeting was with the Vice President of Information Services and left to attend that meeting.

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[99] Interaction between decision maker characteristics and needs assessment process: The decision maker is trying to use the process of determining training needs to gather additional information.

Event 15:	Interview with the Vice President of Information Services to gather information for Phase 1.
Date:	August 1, 1989.
Location:	The office of the Vice President of Information Services.
Participants:	The Vice President of Information Services (VPIS) and the Analyst.

The Analyst introduced herself and gave the Vice President of Information Services one of her business cards. She then showed the VPIS the phases and steps of the PAT Model. The VPIS nodded understanding during the explanation. The Analyst then said that she had a list of questions to ask him. The VPIS said that based on what the Analyst had said on the telephone, he had thought about the knowledge and skills needed by the managers at MSC and he had prepared written answers. At first he had thought, "What should a middle manager be able to do?" To answer the question, he assumed that middle management was a breeding ground for senior executives, and so these managers needed a foundation. They needed to understand the needs and objectives of others in the organization, to communicate effectively with any area of the company at any level, and to recognize that different audiences required different reports. For example, senior management had a broad objective and should get a two page overview and middle management should receive a tactical plan. Also, managers needed to learn that they have to work through others; they have to give up some work because they can no longer do it all themselves; they have to monitor the process and know the questions to answer; they have to be able to sell an idea; and they have to know the hot buttons. He also commented that "managers need to understand how the business works, they need communication skills—how to write for an audience, no 25-page reports, not too technical, and status reports. . . . They need oral skills, then presentation skills, and skills in conducting meetings. Meetings have been inefficient in the past, but now there are new rules." The corporate officers had met off-site recently. One important decision made at this off-site conference was related to meetings. They decided to not call a meeting without an agenda, to start on time, and to make decisions.[100]

He continued by noting that middle managers needed to understand the roles and responsibilities of senior management versus middle management versus supervisors. The middle manager often continued to assume the role of supervisor and wanted senior managers to be more definite than they should be. The VPIS cited the following example: "one manager calls in the middle of the night to check on production. He shouldn't do that. It isn't his role. Managers need to know how to delegate, motivate, and coach. They also need to know finance for nonfinancial mangers. Managers need to know about the cycles of business, the outside interested parties (the Fed, rating agencies, shareholders, investment companies, raiders, and Prine, Inc.). They need to know how the company relates to the external environment from a financial viewpoint. They need to understand the cash trade-offs." The Analyst asked the VPIS for examples of the cash trade-offs. He stated that they needed to know lease versus buy, capitalizing versus expensing, balance sheet, and the relationship of equity to liability. The VPIS also commented that managers needed to understand their role in relation to MSC. He reeled off several questions: "What does a decrease in the prime rate do to us? How does recession affect the agents?" Then he stated that managers needed to understand the implications of these things so they could make business decisions based on this understanding.

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[100] Organization politics, culture, rhetoric: The new rules about meetings made by MSC's officers could affect the corporate culture if the rules led to new behavior.

He noted that managers needed to understand the various departments. Although many had some understanding, they could understand more. The managers needed to understand the difference between capital and operating budgets. He thought that managers did not understand the budgeting process. He said that he had reviewed the capital write-ups and they were not good persuaders.[101] The write-ups were usually in the form of "wants" rather than showing the need. Consequently their write-ups were not useful in getting resources from Prine, Inc.

"The planning process is important. Because few people at MSC understand the difference between the three levels of planning—strategic, tactical, and operations—they are experiencing difficulties at all levels." He added, "Because of lack of planning skills, the company will not be able to reach its goals." The Analyst asked if the current strategic plan was realistic. The VPIS answered, "No, there are too many projects to fund or to manage." He also said that the company was changing. "The old is out. The regional people are threatened. Some have been resistant. Now there are 10 officers, 6 have been with the company 5 years or less. Those with 25 to 30 years of experience have left." He asked the Analyst if she was familiar with the reorganization that had been completed. The Analyst responded that she had seen the President's letter. The VPIS then commented that "one of the most knowledgeable people in the company is in her 70s, is progressive, and knows a lot about the company's process." The VPIS gave the Analyst the woman's name and suggested that the Analyst talk with her.

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[101] Organization culture: Write-ups in this culture refers to specific budget proposals.

The VPIS continued with his list: "Decision makers need problem analysis and decision making." The Analyst asked for an example of when lack of decision making had resulted in a performance problem. The VPIS gave the following example: A group of people assumed that something was wrong and were planning to spend a busy 2 weeks solving the supposed problem. The VPIS said he had asked three questions and then said that the assumed answer could not possibly be right. All agreed and reanalyzed the situation. According to the VPIS, this situation was caused by lack of decision making skills.

The Analyst asked what non-information services managers needed to know about information services. The VPIS responded, "Everybody has roles and responsibilities. The requestor has to define what they need. There is a life cycle of a project, the timelines; there is a difference between big projects and little projects, the technology." The Analyst asked who needed this information. The VPIS responded every manager, the officers at MSC, and their direct reports. The Analyst asked how many people he had reporting to him and he responded that he had four midlevel managers reporting to him and five people who were close to manager level. The VPIS thought that the Information Services managers should learn about operations, accounting processes, legal (fair standards and Equal Employment Opportunity). The Analyst asked him what he meant by *legal* and he responded that he was absolutely appalled by how women were treated at MSC. He was surprised that there had been no EEO complaints.[102]

The Analyst asked about the VPIS's experience with the training programs currently offered by the training department. The VPIS responded that the current interpersonal relations course was good. It taught interpersonal skills. He had had a problem with three of his engineers, so he sent them to the course. They found out that two of the people were highly controlling and that this was part of the problem. The VPIS then commented, "The situation may not have improved, but now they understand it."

The Analyst asked if she could call him back if she had additional questions and he answered yes.

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[102] Analyst characteristics; organization politics: The Analyst was surprised by the VPIS's comments about EEO because she was an outsider in the culture and a female.

Event 16: Interview with Training and Development Specialist to gather information for Phase 1.
Date: August 3, 1989.
Location: The fishbowl at MSC.
Participants: The Training and Development Specialist (TDS) and the Analyst.

The Analyst explained why she was there. The TDS interrupted to say thank you. Apparently, the intern had phoned her, apologized, and explained the situation. According to the TDS some of the problem had been caused by a lack of understanding.

The Analyst said she was glad things were working out. She then said she had some questions about performance. The Analyst asked the TDS what she saw as the biggest performance needs. The TDS felt that the biggest needs were for more advanced training. She noted that there were 260 staff and managers located in the city and that about 100 to 120 had been through all or most of the training modules. She also said that they had run two new courses. Most of the people attending the training were between 30 and 50 years old. She also said that current management training was for supervisors and that she had planned an Advanced Management Development (AMD) program for managers. She expected that for these courses they would bring in experts with different viewpoints. The TDS would hire the experts. She said that in this organization initials are important, so she coined the term *AMD* and explained that each of the words was important: advanced management and development. The two AMD programs that had been delivered were Train The Trainer, and Presentation Skills. Other planned AMD courses were

Management Profiles and Getting Feedback from Superiors, Subordinates, and Peers. The next course would be Assertiveness Skills. The TDS noted that it was hard to be heard in this culture. A person can work for many hours on a project and not get recognition. The Analyst asked how ideas had to be presented in order to be heard. The TDS said that it was important to be concise. She also had found out "that you have to say this is what I found out, this is why, give statistics, and give workable options. Deadlines are critical." The TDS said, "People at MSC are used to deadlines because of working with the Federal Regulatory Agency and so deadlines are critical." She also said, "It is important to be up-front because hidden agendas are bad. This is because of the past history of the organization." The Analyst asked more about this, but the TDS hedged.[103] The TDS did share that the previous manager of training and development had transfered to another job in the company because the fights he had had with the VPHR were "so bad." She said, "It was just awful around here then." The TDS said she had heard that the first manager of training and development had been fired, but that was before her time.

The TDS also described how she was responsible for the monthly brown bag sessions. The most recent brown bag had been suggested by the chair of the board. Another time she had asked the legal department to present. When the Vice President of Legal presented, 25 people showed up, including two vice presidents and the entire financial and control departments.[104] The next brown bag would be on personal financial wellness. Brown bags usually had 45 to 50 people in attendance. The time she had had someone speak about right brain/left brain, it was a big deal. A large number of people attended that session. In September, the TDS hoped to put on a brown bag that focused on images and dressing for success.[105]

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[103] Organization culture, rhetoric: The Training and Development Specialist in this paragraph revealed her perspective of the culture, including the importance of meeting deadlines, being up-front, and communicating results in a specific way.

The TDS also offered other training programs. For example, she did a Business Writing Course. The TDS stated that many executives came to that. "However," she commented, "people in this organization are threatened by having their work reviewed. In this course, people had to submit samples of their writing, and in another course on presentation skills, people were told that they would be video taped. Many people called up the morning of the video taping and cancelled because it was so threatening.[106]

She stated that while she would would like to do some training in the divisions, most people in the divisions are overloaded with work. She also stated, "A division is such a political game. There is miscommunication and hidden agendas. The president is a stickler on the budget, and the amount of paperwork for managers or supervisors is staggering. For example, one regional director hasn't been in the field for a long time because of the mechanics and paperwork." The TDS identified the training that she had delivered in the last 2 years. She had delivered 2 entry-level supervisory training courses, 8 supervisory training courses, 8 interpersonal communication courses, 10 three-day overviews of interpersonal communications, 7 brown bags, 4 customer service courses, 3 personal planning and goal setting courses, 1 telemarketing course, and 6 advanced interpersonal courses. She was responsible for originating the idea, contacting the vendors, handling the promotion, registration, room setup, food and coffee during the training, audiovisual, evaluation, and follow-up information. She stated that her biggest problem was with getting decisions made. The decision making process took so long that she did not always know about the availability of trainees or what training was needed in time to do a good job.

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[104] Organization politics, rhetoric, system, culture: The brown bag sessions provided a forum that a subgroup could use to get across its message.

[105] Organization politics: As the person in charge of the brown bag sessions, the TDS had a lot of power because she controlled a communication platform. At times, she used the platform to communicate company-specific messages, and at other times she used the platform for fun topics.

[106] Organization culture: The TDS perceived that evaluating performance was threatening at MSC. In the example, people found ways to learn new skills and to avoid being judged on how well they knew the skills.

The Analyst asked if she could call if she had additional questions, and the TDS said, "Oh, yes. And thanks again for taking care of that other [matter]."

Event 17: Interview with the Senior Vice President to gather information for Phase 1.

Date: August 8, 1989.

Location: The office of the Senior Vice President.

Participants: The Senior Vice President (SrVP) and the Analyst.

The Analyst arrived on time for the scheduled meeting. The Senior Vice President's secretary informed the Analyst that the SrVP was still engaged in an earlier meeting and asked her to wait in a chair by the secretary's desk. About 10 minutes later, the Vice President of Human Resources left the SrVP's office. Then the SrVP greeted the Analyst and asked if she would like some coffee. When she said yes, he got them each a cup from another room. In the meantime, a call came in that he needed to take, so he asked the Analyst to wait at the secretary's desk for a few more minutes. After a few minutes, he invited the Analyst into his office. He apologized for keeping her waiting.

The office was brown, leather, and rich. There were papers on the SrVP's desk, but no books in sight.

The Analyst gave the SrVP one of her business cards and explained the purpose of the interview. The Analyst also showed the SrVP a copy of the phases and steps of the PAT Model and explained that this process was being used to determine training needs. He agreed that the PAT Model made sense. He commented that he had recently attended a left brain/right brain session offered by the training department and that it was interesting. The Analyst responded that she had heard about that session. She again reiterated that the purpose of this needs assessment was to connect training to the organization's future performance goals. The SrVP nodded his head, smiled, and said, "I guess that's not right brain/left brain, right?"

The SrVP then explained that business writing skills were a real performance need at MSC. He felt that these skills were important at all levels of the company. The Analyst asked why they were important and how they affected the organization's performance. The SrVP responded, "People write sentences with no verbs!" He added, "This affects customer service. And, if written material has to be proofread, then it doesn't just get sent out, it has to be approved first."

The Analyst explained that performance-based training starts with knowing where the company is right now and where it wants to be. Performance-based training focuses on the knowledge, skills, and attitudes that will help the company reach its goals. The SrVP nodded his head. The Analyst then stated that she had read MSC's strategic plan, and she asked if the company's strategic goal was doable. The SrVP said no. Then he explained that a reorganization to centralize the company had taken place 2 months ago, and this was still affecting the company. He commented that recently the officers had met offsite and had decided that all meetings should start on time, have an agenda, and have a result. The officers had decided to operate by example—they would be at meetings on time and push to have decisions made. He stated that "a number of people want authority to make decisions, but they don't know how to make them. Middle managers can make decisions dealing with less than $2,000. And when you think about it, so many decisions are for less than that amount." He also stated that "at MSC decision making is low and responsibility is also low. Training could help people learn how to make decisions." The Analyst explained that most problems and opportunities that involve training solutions also have nontraining components. She asked if the lack of decision making was occurring because managers did not know how to make decisions or if there were other reasons. The SrVP responded that "openness with management is a problem. Not enough information filters down. There is a lack of information from the top." He also added that timing the information sharing was important. He said, "You don't just give information, you wait for the right time."

The SrVP said that because of the reorganization, things normally done in the regions were being centralized at the home office, and it was causing resentment in the regions. "But," he added, "stress and change can be good."[107]

The SrVP also said that the process used at MSC to develop new products had worked poorly. MSC had recently worked to introduce two new products, the first products introduced by the company in a number of years. He said that in the future, "Marketing will play a bigger role than they have in the past. They will seek out the information, set the price, be responsible, and answer the questions that need to be answered. The role of the product and acquisitions department will also change." The SrVP said that he had just made the recommendation to sell an acquisition. The company was losing money and it was almost time for the quarterly meeting with Prine, Inc. "If they think I'm putting my butt on the line for a company that's losing money, they're crazy. I've made a recommendation to sell the company."[108]

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[107] Organization system, culture; interaction with training: The SrVP was willing to identify training solutions but he seemed off-hand in talking about the nontraining solutions. In fact, he justified the current situation.

The phone rang and the SrVP took the call from the phone that was on his desk across the room. After speaking for some time, he hung up the phone and returned to his conversation with the Analyst. As the SrVP returned to his chair, he said that the call had been about one of MSC's new products. He had just heard that they had lost their second biggest customer on the product before it had even been introduced. He added that he would have to talk with the customer and try to work things out. Clearly, he was frustrated.[109] He commented that he had been working 14- to 16-hour days and sometimes just solved the problems that he could.[110]

The Analyst asked if his problems came mostly from the development of new products. He answered that a lot of them did. The Analyst asked about the process for developing new products. The SrVP said that this process was not well defined. "Marketing does not understand operations or information services; operations says there is no process. Product design teams need more meetings. Operations and information services are cost areas, and in those areas unit costing will be done. But in the future, marketing will set the guidelines for selling products, give approval, and be responsible for the bottom line. Marketing will also be responsible for cutting costs."

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[108] Organization politics: Prine, Inc., was a motivating factor in this situation.

[109] Organization system, culture: The phone call was a clear indicator that MSC's current method of developing and introducing a new product was not effective in the larger environment.

[110] Organization system, culture: The way things were done in this organization was that a number of decisions had to be made by this person only. He could not keep up with everything, so some decisions didn't get made. At the same time, he wished managers would make more decisions. However, because managers could not get the information until "the right time," they were most likely to be stalled in the decision making process.

The Analyst then summarized by saying that the process for developing new products is important. The SrVP commented, "But the products that we are offering now are important, too. We've got to get the sales force out selling. They sit in the office all day drinking coffee. When I go out to the regions, they are all in the office—to see me. Do they think I want to see them in the office?"

The Analyst began to summarize the future training needs: "It sounds like decision making is an important training need." The SrVP said," Yes, and open lines of communication and involvement are important, too." The Analyst asked if managers felt that they were part of the team. The SrVP responded that communication at MSC was more closed than it had been in the past. More people used to be allowed to come to meetings, and now some of those people had different responsibilities and felt left out at not being allowed to attend all the meetings. For example, the Vice President of Sales had been demoted. In the past, he had come to all the meetings and had access to information. Now, he felt excluded.

There were also some problems because managers did not understand how they related to Prine, Inc., or to senior management or who should be doing what kinds of work. Planning, for example, was causing problems. The Analyst asked if he was talking about the planning for the new products or other kinds of planning. He said, "New products is just one example. It is a real problem."

The SrVP then said that, "Sales is the biggest problem right now. Sales managers are not being effective, and sales have to increase. The sales managers have to know what their role is. They have to sell in the regions."

The SrVP received another phone call. While he was talking on the phone, he glanced over at the clock. An hour and 15 minutes had passed since the time that the meeting had been scheduled to start. When he was finished talking on the phone, the SrVP walked back over the Analyst , did not sit down, and said "Well, if that is all . . ."[111] The Analyst thanked the SrVP for his time and asked if she could call with additional questions if necessary. He said yes. The Analyst thanked him again and left.

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[111] Organization politics, rhetoric; interaction with needs assessment: When the person with power said the meeting was over, it was over. It didn't matter that the Analyst had additional questions.

Event 18: Interview with the Vice President of Human Resources to gather information for Phase 1.

Date: August 8, 1989.

Location: MSC's cafeteria.

Participants: The Vice President of Human Resources (VPHR) and the Analyst.

The VPHR ran into the Analyst in a hallway at MSC and asked her how it was going. She replied that she had been interviewing the people he had recommended about their training needs. The Analyst asked if she could schedule a meeting with him to talk about the training needs of the employees in the Human Resource area. The VPHR suggested that they get a cup of coffee and talk right now. The Analyst agreed and they went to the cafeteria. The VPHR said that he hadn't wanted to say anything earlier because he hadn't wanted to influence the needs assessment process. The Analyst reported that she had interviewed four people and that she had phoned one person more than six times and had left messages but had not gotten through. The VPHR asked if it was the Manager of Operations and the Analyst nodded yes. The VPHR said that the Manager of Operations would be a tough one to get in to see because she didn't believe in developing her people. He added that if the Analyst did get to see her, she should ask her, "In your mind, what is the job of the manager? Where do managers spend their time?"[112]

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[112] Decision maker characteristics: When the VPHR initially told the Analyst to contact the Manager of Operations, he had apparently expected the Analyst to have difficulties in making the

Then the VPHR said that the main problem at MSC was with managing people. The managers were doing the work themselves, 80 to 90 percent of the time. The VPHR said that the primary responsibility of the manager should be to train, develop, appraise, and coach his people; but the managers and supervisors didn't know these things.

The VPHR also brought up a problem with sales. He said, "The sales force is sitting in their offices drinking coffee when they should be out selling."[113] He also said that MSC needed sales right now because last year had not been a record year. The Analyst commented that the person in the sales training position seemed to be interacting with both the sales and the marketing areas. The Analyst asked if this perception was correct. The VPHR agreed and said that the new products were not being introduced in a good way at all. He said that in the company where he had previously worked, they introduced a new product by having brochures made, using flip charts, and bringing in four buyers. Each sales manager made a pitch for the product, which was videotaped. The brokers and buyers then critiqued each sales manager's presentation. After that, the sales managers were ready to sell and had confidence. This training process was not being done at MSC.

The Analyst asked the VPHR what the performance needs in the Human Resource area were. The VPHR said that he wanted the Analyst to give him feedback on the Manager of Training and Development as a manager. He said

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contact. The VPHR wanted to use the needs assessment process to get information that he desired.

[113] Decision maker characteristics: The VPHR was using the same phrase that was used by the Senior Vice President.

that he had hired the Manger of Training and Development to do the management things like needs assessment and evaluation of training. He didn't think that the Manager of Training and Development's strong suit was delivery of training. The Analyst said she thought that the findings of the needs assessment would influence the VPHR's decision about the role of the training manager. The Analyst told him that he could look at the needs assessment results to determine whether most of the training should be purchased from vendors who would deliver it or whether the training needed to be customized for MSC. The VPHR agreed. The Analyst then explained that with performance-based training, it was important to look at the gap between where the company was and where it wanted to be. The Analyst said that she needed information about where the company wanted to be and where it was. The VPHR nodded his head and said that the latest change was in the marketing area. While marketing would not be responsible for selling, they would be responsible for making sure that selling the product was profitable. The Analyst asked about whether the strategic plan was a good view of the company's goal. The VPHR replied that the strategic plan would not happen. Instead, MSC would work for 2 to 3 years to make the old products grow. The VPHR named the three products that would be the focus for future growth. He added that any new products would be similar to the products currently offered.[114]

The Analyst asked about the hiring of new people. The VPHR said that "over the next 3 years there would be some hiring in sales, operations, and information services. Sales would have to hire about 15 to 20 people, operations only a few people, and information services about 10 to 15 people. The support staff would receive no new people."

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[114] Organization system, rhetoric: Two key people in the organization are saying opposite things about where the future focus will be. Each one's rhetoric sounded plausible.

The Analyst asked the VPHR about the implications for the human resource area. He responded that Human Resources should be used for helping define career ladders and development opportunities. Human resources should be used as a resource. Managers in his area needed skills in jobs and roles, delegation, and the Four Styles of Management.

The VPHR then asked the Analyst to give him feedback about where sales training should report. He wondered if it should report to human resources, sales, or marketing. He added again that "the sales force does not need information. What is happening is that they are sitting in the office drinking coffee. People need to get out and work." The VPHR said "the capabilities of the information services area may also be questionable because they never get projects done on time."

The Analyst asked about the effects of training on the human resource staff. The VPHR thought that the interpersonal training program had given his staff versatility. He also thought that writing skills were important.

The Analyst said that she wanted to talk about training that would affect performance. The VPHR noted that the people in personnel had been working under the system that he had set up a long time ago. Because the system ran smoothly, there really wasn't much that his staff needed to learn. He encouraged them to do project management and some internal consulting, but those were not really very big deals. The VPHR then scooted his chair back, folded his arms across his chest and leaned back. He asked the Analyst if she was always so focused: "Don't you ever just talk?"

The VPHR then told the Analyst about "when he had been on the road." He told her the best places to order steaks and barbecued ribs in various parts of the state. The Analyst thanked him for the information and looked at her watch. The VPHR said that he thought the project was going well. As they left the cafeteria, the VPHR talked about a business venture he had in mind that would make him lots of money. He said he hadn't told anyone about it yet. He wouldn't tell the Analyst what it was but said only that because of his unique experiences, he was the right person for the business. He said that if he went into this business, he would be in high demand and on the road again.

Event 19: Interview with the Vice President of Sales to gather information for Phase 1.

Date: August 10, 1989.

Location: The office of the Vice President of Sales.

Participants: Vice President of Sales (VPS) and the Analyst.

The Analyst gave the Vice President of Sales her business card and explained the purpose of the meeting. She also showed him a copy of the phases and steps of the PAT Model and explained that it would be the process used for determining training needs at MSC. The Analyst explained that they were on Phase 1, Step 3. The Analyst said that she wanted to talk to him about the training needs of his people. The VPS said that he had 20 sales managers reporting to him. He also had six upper-level managers reporting to him. He didn't think one group of managers was still reporting to him, but he wasn't sure. He asked the Analyst if she had heard whether the group was reporting to him. The Analyst said that she had not heard.[115] The VPS said that sales managers needed knowledge and skills in sales management. They needed reinforcement of their selling skills, including such things as negotiation, closing, and presentation skills. The Analyst asked how having these skills would affect the bottom line, and the VPS replied that sales training would affect the sales managers' ability to close sales. The VPS said that he had seen this type of training make a difference. The sales managers also needed training on how to train others to sell. The VPS said he was not sure how this knowledge would affect the bottom line, but he was sure it would. The VPS also said that sales managers have to know how to monitor what is taking place. The effect he had seen was that sales managers lose contact with trends in the market place. Sales managers also needed skills in getting and giving feedback, including informal, day-to-day, curbstone coaching. The VPS described a new system of record keeping that was being implemented. The current system was labor intensive, so it was hard for him to keep track of more than bottom-line numbers. Consequently, at corporate, they didn't know what was sold, what was supposed to have been sold, and what had happened as a result of the sales calls.[116] The VPS said that when the new system of record keeping went in, training would be needed. There would also be a change in work design. Right now, he was trying to figure out how to get sales managers to spend more time on the road and still have them be able to manage. He was thinking of using portable computers. He said that at the current time, sales managers were like general managers, each one managing their own P&L (profit and loss) area. In the future, sales managers would also have accounts. The question was how to get the sales managers on the road and still have them able to manage. He described it as a logistics problem.

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[115] Interaction between organization culture and needs assessment process: An upper-level manager asked the Analyst if she had heard about who now reported to him. This was an example of the informal communication process at MSC.

The current training that the sales force got was minimal—one general session. But, when the new system went in, more training would be needed.

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[116] Organization system, culture: MSC's system for doing business meant that the corporate decision makers had only bottom-line performance data about regional sales. The Analyst wondered how performance was rewarded or how feedback was given if there was no specific, individual performance data.

Product knowledge especially on the new products was important right now. The VPS had been working on a project with the training department. He said each group of sales people needed product knowledge training. They also needed training on how to install equipment. One of the companies that MSC had purchased had an automated machine. MSC people had to get the process of the automated machine down. The VPS added, "In the future, we will add trainers to teach the customers about how to use the equipment."

The current sales training programs included a program for training new people and a refresher training course. According to the VPS, Money System Company's refresher training program covered most of the needed skills that he mentioned earlier.

The Analyst asked about training on the new products. The VPS said that they were right now planning training for seven new products, but that they did not have the information that was needed from Marketing. The Analyst asked what information was missing. the VPS answered, "The guts of the product. We don't know the advantages, the disadvantages, or the target customer. We need to establish a new-product process. We didn't have a process so we're testing the products in real life."

Then, the VPS said, "Did they tell you downstairs that I just met with the Manager of Training and the Sales Trainer and told them that I didn't have time for this long-term stuff?" The Analyst responded, "No, but that makes sense."[117]

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[117] Interaction among organization system, politics; decision maker characteristics; analyst characteristics: The MTD had not given the Analyst information about previous communication with the VPS. The Analyst perceived that the VPS was under pressure with the new products that were being introduced now and was not interested in a future training needs assessment.

The Analyst said that she understood that with the current situation, the VPS needed training that helped him right now. She then asked what the top priority training needs were. The VPS responded, "Product knowledge and training on how to install equipment are my hot buttons." He also asked the Analyst if she had seen a copy of the Position Profile Report that described the knowledge and abilities needed for the sales positions. The Analyst had not seen the report, so the VPS had his secretary get the Analyst a copy of it. The Analyst thanked the VPS for his time and asked if she could call back if she had additional questions. The VPS said yes.

She thought he was frustrated because MSC's training staff had not listened to him, so the Analyst communicated that she had been listening and understood.

Event 20: Interview with the Vice President for Development and Acquisitions to gather information for Phase 1.

Date: August 10, 1989.

Location: The office of MSC's Vice President for Development and Acquisitions.

Participants: The Vice President for Development and Acquisitions (VPDA) and the Analyst.

The Analyst gave the Vice President for Development and Acquisitions her business card, explained the purpose of the needs assessment, and showed him the phases and steps of the PAT Model. The Analyst explained that this process would be used for determining training needs. The Analyst then explained that performance-based training focused on the gap between where the organization wants to be and where it is now. Once the gap is identified, training can be provided that gives people the knowledge, skills, and attitudes needed to reach the goals. The VPDA responded, "There is a huge gap in management at MSC. There is no unit costing, no problem analysis, no scheduling." The Analyst asked him to explain further. He said that unit costing is a game. "When you are building widgets, you look at the number of people and the widget cost of 59 cents and then you figure out how to achieve it." He stated that unit costing was not done at MSC. "For example, most of the work is done on Wednesday, but they have the same number of people all week long because they can't figure out how to do unit costing and scheduling to get more people working on Wednesday. Managers don't know how to deal with problem employees or how to document to achieve goals. They have objectives, but they don't manage by them. They don't know how to set up a work flow." He mentioned that he had been employed by MSC for only 3 years and had been trained by a local competitor. He said that the competitor's in-house unit cost program had been really good, and he suggested that the Analyst try to find out about that program. The Analyst asked if the VPDA often used his unit-costing skills at MSC. He replied, "No, it really isn't acceptable to pull out paper and start doing that kind of figuring during a meeting at MSC."[118]

"In this organization, problem definition is a problem," he said. The Analyst asked him for an example. He said that right now he was selling a subsidiary. The officers knew they were losing money but they had not been able to analyze why. "MSC is poorly organized. If you have a genius doing something but the person doesn't know how to manage, then, in this company, you make that person a manager." He added, "Day-by-day management is also a problem. Those who have been with the company a long time don't know any models. They don't know the systems like life cycle or product management. They operate through informal communication. They don't follow the [organization] chart. For example, if a manager is out of town, a vice president can come and take one of that manager's people away to work on the vice president's project."[119] The Analyst asked what would happen when the manger came back to town. The VPDA said. "Nothing. The borrowed person would continue to do long-term work on the vice president's project."

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[118] Organization culture: If the culture prevented the VPDA from applying unit costing skills, the Analyst expected that training managers on unit costing would not transfer from the training room to the job.

[119] Organization culture: The way that things were done at MSC meant that a manager might lose his resources if he or she was out of the office and unable to protect the turf.

The VPDA leaned his arms on the desk and said, "What they really need here is Management 101." He continued, "There have been changes in the business and in the industry. Top management has grown through street smarts, and they've been lucky. But now, the federal regulations have changed, there are more competitors, and the company has become larger and more diverse. The rudimentary management skills of the past are getting in the way. They don't do good decision analysis here, but the advantage is that they know their business because they have all grown up in it. In the future there will be new products, new clients, and new markets.[120] The company is facing new regulations now and trying to adapt by developing new products and a new system." The VPDA also described how the company was automating the information in the regions and how, as a result, people would be forced to learn new skills.

The VPDA had two people reporting to him. He said that what his people needed was project management. They needed to know, for example, how to lay out a task plan, schedule, and use a PERT Chart. They also needed to know more about the business of the company. One of the new products was set to be handed off, and another was halfway developed with the pricing set. The Analyst asked how the seven new products that she had heard about were going to be fit into this scheme. The VPDA laughed and said, "I didn't know we had that many new products. Did you hear what these new products are? I think that I'll call around and find out about that." The Analyst described the products that she had heard about being developed, and the VPDA stated that now he understood. "Those were not really new products but adaptations of old products."[121]

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[120] Organization system, culture; decision maker characteristics: The external environment is changing, which was causing changes in the internal environment and how the work must get done. The decision makers' characteristics were hampering the adaptation to the external environment because they did not have the appropriate skills. One important characteristic they did have was knowledge of the business.

The VPDA said it was hard for him to have time to develop new products when he was busy divesting the company of two of its subsidiaries. He agreed to talk with the Analyst about training later if she needed more information, but stated that what he really believed was that MSC needed Management 101 at the executive level.

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[121] Organization culture, system, rehtoric: New products are not new products in this company. Product adaptations do not necessarily involve the VPDA. From his communication, it sounded as though he did not own these products at all.

Event 21: Interview with the Manager of Operations to gather information for Phase 1.

Date: August 10, 1989.

Location: Hallway outside an eighth floor meeting room.

Participants: The Manager of Operations (OM) and the Analyst.

The Manager of Operations was not in her office for the scheduled meeting. The receptionist paged her, and she ran out (almost literally) from a meeting she was attending on the eighth floor. She met the Analyst at a table in the hallway and apologized for being late. The Analyst gave the OM a business card, explained the needs assessment, and showed her the phases and steps of the PAT Model. The Analyst explained that the process was being used to determine the training needs at MSC. The OM said she only had a few minutes because she was in an emergency, high-priority meeting that had just been called, but that she had thought about the training needs after the Analyst had called. Her people needed business skills, not management skills. Her list of training needs included writing, presentation, finance for nonfinance majors, balance sheet, and return on assets. Her people also needed proposal writing skills. The OM further said that her people had to be able to analyze a situation, calculate costs and benefits, compare options, and either make a decision or make a proposal. They needed to know how to negotiate, how to conduct meetings, and how to run a project. The OM also said that planning was needed at all levels within MSC. For example, the meeting that she had just come from was taking place because of a lack of planning. She said that "machines need to be installed by a certain date, but we have not even been able to get the information for making the decisions until today. So we are working under pressure to get it done. Managers are put in a crunch of doing last minute things." She also said that the same thing happened with the budget every year. The OM emphasized that new skills in planning and project management were needed at the top level of MSC. When asked which was the priority, she responded that "project management would be a good starting point. The current management training is very elementary." She continued, "The training is good for new supervisors but not for managers." She also said that the timing of training was important. "It is critical that training occur when the person needs it. Training my people after they have been on the job for 6 months is of no use."

The Analyst heard the inference that the OM would like training developed but not that she would support training, so the Analyst asked her about it. The OM said that she would not devote a person half time to a training project but that she herself would be willing to be involved in planning training and reviewing the training before it was delivered. Both the Analyst and the OM heard raised voices coming from the meeting room. The OM looked guilty and said that she really had to get back to the meeting. The Analyst asked if she could call with additional questions. The OM said yes and ran (almost literally) back into the meeting room.

Event 22: Analysis of information gathered for Phase 1.

Date: August 1989.

Location: The Training and Development Research Center.

Participants: The Analyst.

The Analyst completed the PAT worksheets for Phase 1, Steps 3, 4, and 5. These completed worksheets can be found in Appendix G.

To analyze the information that had been collected, the Analyst reviewed her write-up notes. She identified the knowledge, skills, and attitude needs that had been connected to performance. For each identified training need, the Analyst looked for substantiation in the write-ups of the other events. Some needs were corroborated by more than one source. The Analyst determined that she lacked access to the President and thus to some key performance information. In addition, the organization situation was changing, and the key players in the organization were being assigned to different areas. Without knowing the President, the organization's plans for the future, or even how the future goals were being defined in this company, the Analyst decided that the best option was to list the performance needs that had been identified and to highlight those that had been identified by several officers in the company.

The Analyst also decided that because the competencies of various officers had been mentioned, specific people should not be connected to specific training needs. The concern was that specific identification would result in finger pointing and turf wars.

The Analyst also considered the following ethical dilemma. While she had been hired to identify training needs, there was a distinct possibility that MSC did not have training needs. If the organization was going to rely on current products, with which MSC's current managers were very familiar; if there would be few new hires; and if there would be little change in the way business had been done over the years, then were there any urgent training needs? The Analyst carefully reviewed the write-ups to determine who had said what and determined that the clearest message was that, although some decision makers did not want to adapt to regulatory and environmental changes, clearly, adapting to the external environment seemed imminent. This would require the development and sales of new products, as well as finding new ways for managers to work together. Using this information as a base, the Analyst began to write the in-process report. The Analyst used the PAT worksheet for Phase 1, Step 6, as a guide in this process.

Event 23: Telephone call to the Manager of Training and Development to give him a progress report.

Date: August 11, 1989.

Location: Telephone call.

Participants: Manager of Training and Development (MTD) and the Analyst.

The Analyst telephoned the Manager of Training and Development to inform him that she had completed the interviews and was in the process of analyzing the data. He indicated that he would be glad to have the information and commented, "A culture change has to take place." He named a reputable organization development group who would be coming in to analyze the organization. This organization development group was coming in at the mandate of Prine, Inc., and would report directly back to Prine, Inc.

The MTD also informed the Analyst that the Senior Vice President had told the Vice President of Human Resources that "he had talked to the Analyst and that he had kicked her out of his office after an hour." The Analyst wondered aloud if she had stayed too long. The MTD suggested that the Analyst be prepared, state the purpose of the meeting, state the agreed upon time, and stay only for that time. This was the new protocol for meetings.

The Analyst then remembered that the SrVP had received a letter from the MTD describing the purpose of the meeting. The Analyst had also set up the appointment, stated the purpose, and prepared a list of questions. She also remembered that the SrVP had been late and that he had chosen to sit where the clock was not visible to him. He had also taken telephone calls during the meeting. The Analyst considered that the SrVP might be concerned about some confidential information that he had discussed and how that information would be used. The confidential information had not been recorded and is not presented in the write-ups. However, the Analyst determined that it would be important to complete the analysis quickly and to report the findings in a nonthreatening manner. She also decided that it would be important to verify the support of the Vice President of Human Resources for the project at the next meeting.

Event 24: Meeting with the Manager of Training and Development to give him a copy of the in-process report.

Date: September 1, 1989.

Location: The office of the Manager of Training and Development.

Participants: The Manager of Training and Development (MTD) and the Analyst.

The Manager of Training and Development reviewed the letter and the in-process report that the Analyst had sent him. He suggested some minor changes in the report. For example, he suggested changing the words used to describe sales training so they would be less threatening to the Vice President of Human Resources. The suggested changes were minor, and the Analyst agreed to make them.[122] The Analyst agreed to send two copies of the revised report to the MTD the following day so that he could pass one copy of the report on to the Vice President of Human Resources.[123] The in-process report for Phase 1 is in Appendix I.

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[122] Interaction among decision maker characteristics; organization rhetoric, politics on the process of determining training needs: The Analyst knew that she had accurately quoted the terminology used by the VPS, but the MTD was not interested in the accuracy of the words used in the report. He wanted to modify the report so that it could be easily approved by his boss.

[123] Decision maker characteristics, organization culture: The MTD reviewed the report and gave approval before it was passed up the hierarchy to his boss. To be successful, the report had to be acceptable to both decision makers.

Event 25: Meeting with the Vice President of Human Resources to review the in-process report.

Date: September 21, 1989.

Location: The office of the Vice President of Human Resources.

Participants: The Vice President of Human Resources (VPHR), the Manager of Training and Development (MTD), and the Analyst.

In the hallway on the way to the scheduled meeting, the Analyst saw the Sales Trainer and asked her how it was going. The Sales Trainer said, "Not well." She said there had been a meeting the previous day with the Vice President of Human Resources, the Manger of Operations, the Vice President of Sales, the Manager of Training and Development, and herself. During that meeting, the VPHR had told both the Manager of Operations and the Vice President of Sales that they were "inept." There was a lot of tension in the room and nobody knew what to say. As a result of that meeting, the Sales Trainer was no longer sure about her position with the company. It had been rumored that she would report to sales, and she didn't know whether to hope that happened or not. She thought that if she stayed in the Human Resources Department, she would not get much cooperation from the other departments. She also knew that the Vice President of Sales did not really support training. Her closing statement was that things were really up in the air.

The Analyst continued down the hall and into the office of the MTD. When she entered his office, he had the newspaper spread out and was checking his lottery numbers. At exactly 10:30 a.m., the Analyst and the MTD went to look for the VPHR. (The meeting had been scheduled for 10:30 a.m.) They found the VPHR in the cafeteria talking with someone else. He and the

MTD discussed where to meet and tried to identify which rooms were available for a meeting. After some discussion, they decided to meet in the office of the VPHR.

Once the office was reached, the VPHR needed several minutes to clear material from his meeting table.

The Analyst explained that she had asked them to schedule this meeting because she had completed the initial interviews and wanted to know how well the information in her report fit the organization. The VPHR nodded his head and said, "Yes, everything that you said fits. This report hit the nail on the head." The VPHR again reviewed the document. He commented that the nontraining needs were accurate and told a story that confirmed each one.

The next steps of the project were discussed. The VPHR wanted the Analyst to interview two more people. The Analyst said that some reasons for additional interviews would be to make the final report more inclusive, more accurate, or to involve these people more in training. The VPHR said that although the document was accurate, he wanted the Analyst to interview someone from a region so that the regional perspective was included. He also wanted her to interview the Vice President of Finance. The Analyst asked about interviewing the President of MSC. The VPHR said that the President was in the process of selling two companies right now and would not really listen. The Analyst agreed that she would interview the two people and would add their comments to the in-process report. The Analyst also recommended determining the costs and benefits of suggested training programs. The VPHR said to report back to him when these steps had been completed.[124]

The Analyst and the VPHR discussed in general how the company was changing. The VPHR expressed the opinion that the Vice President of Marketing should be fired.[125] The VPHR told a story about how operations would not listen to the Vice President of Marketing. The VPHR had intervened with the President, and the Vice President of Marketing had backed down and left the VPHR "hanging on the line to dry." The VPHR also told stories about his recent visits to the regions. These stories confirmed existence of the "good old boys" network that had been described earlier.

The Analyst asked the VPHR and the MTD if they wanted to prioritize the training options listed in the in-process report. The Analyst pointed out that each performance issue involved major nontraining causes of performance as well as the training causes. The MTD suggested starting with something tangible like managing work. The Analyst said that project management was tangible and was a more strongly identified need. The VPHR wanted to bring someone in right away that "everyone will think is wonderful, like the program for executives that everyone is talking about at Prine, Inc." The VPHR set the date for training as March of 1990 and began talking as though the Analyst would deliver the training. The Analyst explained that she would not deliver the training because her sole job was to do the needs assessment. She also said that for the next phase of the analysis she would need documentation on various jobs. The Analyst also mentioned that she still had not received an organization chart. The VPHR said that he would push for the chart and that he and the MTD would get the documentation for the jobs. The Analyst agreed to report back after the next two interviews.

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[124] Organization politics; decision maker characteristics: The Analyst wondered if the VPHR wanted access to the kind of information she was gathering and was purposely keeping her from talking with the President of MSC.

[125] Decision maker characteristics: The Analyst wondered whom the VPHR would not like to see fired and if he really meant those words.

Event 26:	Interview with the Vice President of Finance to gather information for Phase 1.
Date:	October 6, 1989.
Location:	The office of the Vice President of Finance.
Participants:	The Vice President of Finance (VPF) and the Analyst.

The Vice President of Finance indicated that currently the company was split: "There are the home-grown people who have risen through the ranks to become executives. This group includes the President of the company and the Vice President of Sales. This group has learned management by trial and error. In the other group are the omni-managers who can manage anything and who have been brought into the company. As a result of the home-grown management, things get scheduled in the wrong order and tasks are being planned before the mission is known. The second group of managers tries to apply Management 101 up the hierarchy, but it just gets pushed off the table."

The VPF continued: "Process and project management skills are needed. Components of this skill include defining the project (what do we *really* want), strategizing (what deliverables are desired and what are the options), selecting among the options, assigning people to the project, laying out the project with charting (i.e., PERT, Gantt), and monitoring the project while it is in process.

"Without monitoring the projects during the process, you can go off track and you don't even know it. Currently, in this organization, projects begin by assigning people to them."

He added: "There is a poor understanding in the company of the difference between staff and line, so the line people go golfing and the staff people get shot. There is confusion about who has what responsibility. It is a weakness of the organization. The ex-vice president of finance fostered it. He knew the business inside out and he used the informal system to get things done."

The VPF stated, "What the company needs is to plan, act, and review. Right now, planning is missing, there is a lot of acting, and there are no criteria for reviewing. Process management only affects people when there is a project." He continued, "Accountants don't generally need project management. If training were held, one or two accountants would be sent."

He returned to the company problems: "Right now, the company is crossing over the line from the entrepreneur to the professional manager. There is chaos in the market place, and the last of the original founders left last week. MSC's biggest problem is in making a strategic plan, carrying out the strategic plan, and reviewing it. Planning is a step that is missed the most. Also, the managers can not delegate responsibility."

One company with which the VPF was familiar had a policy, "You make a deal, you keep a deal." But in this company, the VPF said, "The philosophy is you make a deal, you do what you want. Especially the Information Services Department."

In the accounting area, the VPF wanted to grow people and have them be innovative and creative. He said: "Customer-service training or something in that mentality would be good. For example, something offered by the American Management Association." The Analyst asked how this would affect the organization's bottom line. The VPF answered that managers make decisions based on information from the Finance Department. "Right now, if a manager asks for information, the financial person, in trying to be helpful, is likely to give him or her so much information that the manager is buried in data and can't use it to make a decision."

He felt that accountants also needed something to stimulate their creativity and their abilities to innovate.

There were also some needs for a team-building process, but "this may not be a training issue," the VPF said.

Strategic planning at the department level was also needed. According to the VPF, "The other departments do not do this because they have the attitude that strategic planning is a management responsibility, not a department responsibility."

His priorities and the number of people who would attend each session were as follows:

1. Strategic planning for departments (5 to 10 people).
2. Something to stimulate creativity (8 to 10 people).
3. Customer service (8 to 10 people at the management level and 10 people at the clerical level).

The VPF added: "Right now leadership seems to missing in the organization. They worry about toothpicks, and the trees are falling down on us."

He said he would support the training if the President does, but if the President did not support the training and says to pull the people out for other meetings, then he would pull them out. He also said that the new supervisory training was working for his people.[126] The Analyst asked if she could get his help in calculating what the performance gained by training would be worth for some of the proposed training options. The Vice President of Finance said yes. The Analyst agreed to call back when she knew specifically what help would be needed.

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[126] Organization culture, rhetoric, politics, system: The Analyst felt that she had found the person who was giving her the straight scoop on the organization—the insider's perspective. Things started to make sense. If the organization was still in the process of a reorganization, one would

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expect that the roles might not have been defined and there might be some jockeying for power in the organization. The differences between the old and new management and between the staff and line functions explained some previous comments by interviewees.

Event 27: Interview with a Regional Manager to gather information for Phase 1.

Date: October 13, 1989.

Location: MSC's Cafeteria.

Participants: A Regional Manager (RM) and the Analyst.

The Analyst gave him her business card, explained the purpose of the needs assessment, and showed him the phases and steps of the PAT Model. The regional manager said that the company was now in the stage where major products were topping out, so Marketing was looking at new products.[127] According to the RM, immediate training was needed by the field force. He said: "People with backgrounds in finance can come up with innovations in the field. For example, a fellow in St. Louis tried to find out what was needed in the field and bring it up to the eighth floor. It was good idea but the eighth floor still doesn't know about it."[128]

The RM said that most formalized training only provided some things that his people could use. His feeling with training was that "if my people get 20 percent out of it, the training is great because the 20 percent may be worthwhile stuff."

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[127] Organization system, culture, rhetoric: The RM was describing the interaction between the organization and the environment using the perspective and rhetoric of his subgroup (i.e., the products were topping out).

[128] Organization culture: In this organization, it was difficult for those at the lower level to get their ideas heard.

According to the Regional Manager, his people needed territory management (how to manage a large number of accounts in a geographic area), financial processing, planning, and telephone presentations. The most important need right now had to do with territory management.

For management training, he would send one to three managers, depending on the course content. He was really not certain what training midlevel managers needed right now. "With sales, my people don't know how to maintain and at the same time sell new accounts." The Analyst asked if he had an example of when MSC had lost a customer because of this lack of skill. He said, "Yes, there are new competitors in one product area, and because the company was out of touch with the market, they lost a ton of customers. In another example, the customer loved the system but didn't know who maintained it when it went down, so they cancelled the machine." He noticed there was a real difference between the corporate culture and what happened in the regions. The RM said his job was to take decisions made at corporate and make them logical and pleasant to the region.[129] He said that that had not always been easy. The Analyst smiled her understanding of this comment and asked if she could call the RM later if there were additional questions. The RM agreed that the Analyst could call him later if needed.

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[129] Organization politics, culture: The RM's job had been to communicate from corporate to the regions, but not in the other direction. Another implication of the comment was that the RM had not always perceived the decisions as being logical or pleasant.

Event 28: Telephone call to the Manager of Training and Development to have him identify the person to calculate costs and benefits.
Purpose: Identify appropriate person to calculate costs and benefits.
Date: October 13, 1989.
Location: Telephone call.
Participants: The Manager of Training and Development (MTD) and the Analyst.

The Analyst telephoned the MTD and told him that she had interviewed the Vice President of Finance and a Regional Manager. She said that she needed to identify the "credible person" who could and would calculate the performance value of the training programs. She asked the MTD if the Vice President of Finance would be the best person to do this activity. The MTD said yes, because of his formal position at MSC. The Analyst asked the MTD whether he wanted to collect estimates for the costs of the programs or whether he wanted her to gather that information. The MTD said that he would gather the cost information because he had easy access to vendor bids.

The Analyst also told the MTD about the customer-service training for the financial area. She suggested exploring the possibility of using the customer-service training as a program for introducing performance-based training. Her thinking was that the training would involve 18 people who reported to the same vice president. The VPF did not appear to be in the middle of the company reorganization. In addition, the VPF seemed to be a person ready for some change. He had identified training needs for the managers who reported to him. The MTD was pleased that someone had been found who was willing to work with training. The MTD said that customer-service training could come out of the current training budget.[130] The Analyst asked the MTD if she should gather additional information about the perceived need. He said that she should.

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[130] Organization politics, interaction with needs assessment: Through the needs assessment process the training function was making connections with a powerful person in the organization.

Event 29: Meeting with the Vice President of Finance to have him calculate performance value gain of proposed training programs.

Date: October 31, 1989.

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance (VPF) and the Analyst.

The Analyst asked the Vice President of Finance to predict the value of the performance to be gained with some of the training programs. The Analyst showed the VPF the performance value worksheet from *Forecasting Financial Benefits of Human Resource Development* by Swanson and Gradous (1988). The VPF said, sure, and then asked the Analyst why she had selected him for this task. The Analyst responded that the VPF's position within the company gave him credibility when communicating financial numbers. Also, he had access to the financial information.

The Analyst described the purpose of the worksheets to the VPF and explained the steps of the process. The Analyst used the example of widgets to explain how to value performance. The financial benefit to be gained from implementing a widget training program could be compared to the financial benefit of not implementing the program. If the training helped people produce more widgets per hour or higher quality widgets that would sell for a higher price or widgets that were made at a lower cost, then the new performance would be adding additional value to the company. But, the cost of the training for each option would have to be subtracted from the performance value of each option, and then the options would have to be compared in order to determine the real financial benefit of widget training. The concept made sense to the VPF, and he got out a pencil so that he could complete a worksheet.

The Analyst suggested that because the customer service program for his department had the most concrete output, they might want to calculate the performance value for that training program first. The VPF decided to compare the performance value of training versus no training. He had some difficulty in identifying the unit of work to measure. After some thought, he decided that the real issue was what occurred with poor customer service. His perception was that with poor customer service, people got too much extra information and his department's resources were wasted in gathering extra information. He decided that the unit of work performance to be measured was *appropriate responses*. He defined *appropriate responses* in terms of the ability of others to make decisions. The VPF used the examples of inappropriate responses he had seen over the last year as the basis for determining the criteria of an appropriate response and then the value of an appropriate response. He calculated that with training he could expect an increase of 50 appropriate responses per week for the whole work group, compared to no increase if no training were conducted. The Analyst noted that the VPF chose a conservative number. The VPF agreed. He assigned a dollar value per appropriate response of $4.00. He said that this was also a conservative figure given the salary base of his people. He did some more calculations and decided that even though $4.00 was an extremely conservative figure, he would use it. He assumed that training could be delivered to his people in 1 day and that at the end of this time, his people would have the knowledge, skills, and attitudes they needed to produce the additional 50 appropriate responses per week. He said that it should be easy to achieve the additional 50 responses because there was plenty of room for improvement. He decided that the evaluation period for both the training and the no training options should be 52 weeks. He also decided that for both options there would not be any performance during the training time. The VPF did all the calculations on the worksheet. When he reached the last calculation, which showed a $10,228 performance value gain for the training, he expressed the belief that "training can be clearly connected to the bottom line, and this was easier to do than I thought it would be." The VPF described a competitive group simulation exercise he had participated in recently at Prine, Inc. Training employees had been key to the success of the simulated company. The VPF said, "Now I understand how it works." The Analyst pointed out that the costs of the program needed to be determined and subtracted from performance values before the process was complete. She said that the Manager of Training and Development had agreed to gather those figures.

The VPF then calculated the performance values for the proposed training on planning. Again, the VPF spent time considering what the unit of measure was and the criteria he would use to measure performance. The VPF also recorded his assumptions on the worksheet. His unit of measure was productive planning hours.

The Analyst checked the time and saw that her allotted interview time was nearly over. She asked the VPF if he would be willing to calculate the financial benefits of the other program that had been identified if she made an appointment for another day. He said, "Sure, this is fun!"[131] The Analyst said that she had a copy of the worksheets on a computer disk. The VPF said, "Really!" The Analyst replied that a computer program (Sleezer, 1988) had been published by Jossey-Bass in conjunction with the Swanson and Gradous book. The Analyst asked what kind of computer system the VPF used. He replied that he had an IBM compatible system. It was agreed that the Analyst would bring in the disk and they would work on Friday.

The VPF suggested that it might be important to have the SrVP's input and validation of the process. The VPF commented that the SrVP had a lot of power in the organization and referred to him as a magician who used scarves and mirrors to disappear and then reappear some place else. The VPF described how the SRVP had been able to disassociate himself from organization performance problems and to take credit for solutions through use of the scarf and mirror tricks. The Analyst thanked him for this information.

The VPF apologized for not having any free time until the next Friday and commented that the process had been worthwhile.[132]

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[131] Decision maker characteristics: The process of calculating the performance value convinced the VPF that it could be done. He "owned" the numbers, and the value of training increased in his eyes.

[132] Decision maker characteristics, organization politics, rhetoric; interaction with the training needs assessment: After calculating the performance value of the customer-service training, the VPF wanted to meet with the Analyst again. The worksheets bridged the gap between the human resource perspective and the finance perspective and gave the VPF language that he could use.

Event 30: Review by the Analyst of the findings for Phase 1.

Date: September 21 to November 1, 1989.

Location: The Training and Development Research Center.

Participants: The Analyst.

All the information that had been gathered during Phase 1 of the needs assessment project was reviewed. The information gathered in the three final interviews was compared to the information that had been gathered earlier. The Analyst also reviewed the information that had been gathered in Phase 1, Step 2, about the characteristics of the organization, decision makers, and analyst, and about the purpose and parameters of the analysis. The Analyst also reviewed all the information recorded on the PAT worksheets.

Event 31: Delivery to the Manager of Training and Development of the final report for Phase 1.

Date: November 1, 1989.

Location: Not applicable.

Participants: The Analyst.

The Analyst delivered the final report for Phase 1 of the needs assessment to the MTD. In this report, the Analyst recommended three alternatives for training. Option 1 was strategic planning, decision making, and project management for midlevel managers. Option 2 was strategic planning, decision making, and project management for executives and midlevel managers. Option 3 was customer-service training for the managers and supervisors who reported to the Vice President of Finance. For each option, the advantages and disadvantages were highlighted.

The advantage of Option 1 was that the training would address the knowledge, skills, and attitudes that the decision makers who were interviewed had identified as critical to the organization. The disadvantage was that if the program did not gain the support of the President there was a question of how much the midlevel managers would apply the knowledge and skills learned in training to their jobs.

The advantage of Option 2 was that, because of the culture, training that had the President's support would be supported by other managers at MSC. If the president agreed, then this would be an obvious first choice for training. But if he did not agree, serious consideration should be given to whether this training would be appropriate for MSC at this time.

The advantages of Option 3 were that (a) training could be delivered quickly and inexpensively and (b) that there would be a high expectation that the skills learned in training would be transferred to the job because of the Vice President of Finance's support. The disadvantage was that such training would address a localized problem within a department, not the larger problems facing the organization.

Based on the criteria for selecting a solution, Option 3, customer-service training for financial professionals, was the low-cost, low-risk option. Option 2, strategic planning, decision making, and project management for executives and midlevel managers, would offer the greatest potential return for the training investment, but it was the riskier decision.

The Manager of Training and Development telephoned the Analyst that afternoon to say that his preference was to combine Options 2 and 3. He asked the Analyst to resubmit the report combining Options 2 and 3 as one recommendation and not to present alternatives. The Analyst pointed out that she had yet to interview the President of MSC or determine his opinion about whether these were critical needs to be addressed by training. She also explained that although the Manager of Training and Development had the authority to make such a training decision, a number of nontraining factors affected each option. The President was the only one in the organization who had the authority to make the management decisions needed to address the nontraining causes of performance.

The Manager of Training and Development said that he understood and that if the President accepted the needs assessment report, the President would be in a position where he would be committed to addressing the nontraining components of performance.[133]

The Manager of Training and Development then told the Analyst that he had a copy of MSC's organization chart, which he had promised to deliver some time ago.

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[133] Interaction among analyst characteristics; decision maker characteristics; and the needs assessment process: In this situation, the Analyst did not agree that the President, in accepting the report, was committing himself to addressing the nontraining components of the performance problems. The Analyst would have much preferred to interview the President prior to submitting the report. However, this option was clearly not available.

Event 32:	Meeting with the Vice President of Finance to have him calculate performance value gain of the proposed decision making and project management training programs.
Date:	November 3, 1989.
Location:	The office of the Vice President of Finance.
Participants:	The Vice President of Finance (VPF) and the Analyst.

The Analyst arrived for the appointed meeting and learned that the Vice President of Finance had been tied up for a few minutes. She waited in his office. After about 15 minutes the VPF arrived. He said that he was pleased that the Analyst was there and that he had been thinking about connecting training to the bottom line. Before the Analyst could respond, another vice president stuck his head into the room and asked if the VPF was coming. The VPF said he would be there in a while.

The Analyst said that it sounded like it had been a crazy day for him. The VPF responded that it had been. He had just been down the hallway dealing with Prine, Inc., about something that had to get done, and now there was a company event that he was supposed to attend. The Analyst asked if he would like her to come back on a better day. The VPF responded, "You would do that?" The Analyst said yes and an appointment was set for November 7.[134]

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[134] Interaction among analyst characteristics; organization culture, system, politics, rhetoric: The Analyst recognized that there had been some changes in the internal system between MSC and Prine, Inc. Because Prine, Inc., had the greater political power, it was important for the VPF to respond to Prine's need. The Analyst also recognized that, because of the culture of Prine, Inc., attending company events was important. The Analyst wanted the VPF's full attention for

Event 33: Meeting with the Vice President of Finance to have him calculate performance value gain of the proposed decision making and project management training programs.

Date: November 7, 1989.

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance (VPF) and the Analyst.

The Analyst arrived for the meeting carrying the computer disk with the Forecasting Financial Benefits computer program. The Vice President of Finance reiterated his previous appreciation that the Analyst had understood his situation. He and the Analyst discussed the importance of meeting the needs of both Prine, Inc., and of attending company functions.

He also told the Analyst that he would rather be doing the kind of work that she was doing. He asked some questions about the kind of academic degree the Analyst was getting. The Analyst offered to bring him some information about the University of Minnesota's Training and Development Program.

When the VPF attempted to run the calculation program, he found that his computer configuration did not include the BASICA language program required to run the software. He responded by saying, "That's ok, we'll go find a computer." He tried to use three other computers in his area but found that they all had been configured in the same way and did not have the necessary

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calculating the financial benefits of the various options, and she realized she wouldn't get this level of attention if the VPF hurried though the cost-benefit calculations to get to the company meeting.

system components in place. He thought about calling the Information Services Department but knew that they would not be able to respond within the necessary time limits.

The Analyst suggested that they set up another meeting when the software would be available. The Vice President of Finance apologized for the situation, and the Analyst said that she was planning to keep coming back until they got this done. The VPF laughed and said that he wanted to do the forecasts.

Event 34: Meeting with the Vice President of Finance to have him calculate performance value gain of the proposed decision making and project management training programs.

Date: November 14, 1989.

Location: The Human Resources Department computer area.

Participants: The Vice President of Finance (VPF) and the Analyst.

At the beginning of the meeting, the Analyst gave the VPF a brochure on the University of Minnesota's Training and Development Certificate Program. The VPF thanked her and said that he was seriously considering a career change. He wondered about the salaries in the training field. The Analyst said that it depended.

The Analyst and the VPF went to use the computer in the HR Department. This time the computer did work. The appropriate software had been added to the HR computer, and the calculation program had been transferred to the hard disk.

Using the Forecasting Financial Benefits computer program, the VPF calculated the performance values for all the options. While the computer was "coming up," the VPF commented that the President had announced to everyone at a meeting on the previous day that an important goal in the organization was to move decision making to lower levels in the organization so that managers were making more decisions. When the program came up, the VPF began to fill in his calculations. The Analyst suggested that he record his assumptions on the hard copy, but other than that she did not assist the VPF in determining the performance values. The VPF ran several what-if options. For example, he considered the performance value that would result if managers had three projects per year instead of two. At one point during the calculations, the VPF recognized that the assumptions that he was making would affect the selection of the training program to be delivered. The process of predicting the financial benefits was causing him to hone in on the material that had to be presented during the training program. He said, "This is really good stuff."

The final performance values that he calculated were as follows: For the decision making program the performance value gain with training was $531,200. Without training there was a calculated loss of $639. For the project management program, the gain with training was $228,750. Without training the company would lose $50. The VPF rechecked, in his head, the numbers on the printout to make sure that the numbers were accurate.

After making these calculations, the VPF asked the Analyst if she had heard that the regions had been reorganized yesterday. MSC had gone from six regional offices to two regional offices. The regional managers had been assigned to other jobs. In addition, the corporate offices had been set up by lines of business. The VPF drew an organization chart for the Analyst. The Manager of Training and Development walked by at that time and asked how it was going. The VPF covered up the organization chart and the brochure from the University of Minnesota.[135]

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[135] Analyst characteristics, decision maker characteristics, organization politics: The VPF, because of his position in the company, had access to information not available to the MTD. His willingness to share the information with the Analyst, but not with the MTD, could have been an indicator that it was appropriate for the Analyst, but not for the MTD, to learn the information from the VPF. Or it could have been an indicator that the VPF did not want to make public his interest in a training program offered by an academic institution.

After the MTD had walked away, the Analyst asked what the impetus for the change had been. The VPF confided that the lines-of-business idea had been his and that he had preached it and preached it and finally gotten some support from Prine, Inc.

The Analyst thanked the VPF for his help in calculating the performance values of the options. She also said that the Training Department was calculating the costs of the training options and that she would get back to him with this information if he was interested. The VPF communicated that he was interested in the information.

Event 35: The revised Phase 1 report was mailed to the Manager of Training and Development.

Date: November 17, 1989.

Location: Mailed.

Participants: The Manager of Training and Development.

A copy of the revised Phase 1 report was mailed to the Manager of Training and Development.

Event 36: Memo from the Training and Development Specialist about a vendor bid on customer-service training.

Date: November 22, 1989.

Location: Memo.

Participants: The Training and Development Specialist, the Manager of Training and Development, and the Analyst.

The Analyst received a memo from the Training and Development Specialist indicating that she had contacted a reputable training company and received a bid from them for $6,000 to provide customer-service training. The bid included a specific training needs analysis, a customer focus session, tabulated results from the focus session, a 2-hour executive feedback, and a 1-day workshop for employees.

Event 37: Meeting with an external vendor to review a proposal for an individual assessment tool.

Date: December 12, 1989.

Location: A meeting room at MSC.

Participants: The MTD, the VPHR, an external vendor, and the Analyst.

The MTD asked the Analyst to attend a presentation made by an external vendor. The presentation was on an individual assessment tool that had been developed by a group of psychologists. After the vendor's presentation, the VPHR asked the presenter some pointed questions about how the assessment instrument had been developed, about who had identified the specific skills for the different types of managers, and about the criteria for crunching the numbers. The presenter did not have the statistical background to answer the questions about how the data had been synthesized. The VPHR had a problem with how the information was synthesized and kept coming back to that, saying that it just would not hold up in court. But at the end of the meeting, the VPHR asked the presenter to send him additional information and a proposal.[136] The MTD made several comments during the meeting about how the instrument could be administered.[137]

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[136] Decision maker characteristics: The VPHR gave mixed signals—he did not think the survey produced useful information and he wanted a proposal to be sent to him.

[137] Decision maker characteristics: The MTD made several comments, but the VPHR was clearly the leader of the discussion. This interaction raised some questions about whether the VPHR, rather than the MTD, was making all the training decisions.

Event 38: Meeting with an external vendor to review a proposal for a customer service program.

Date: December 14, 1989.

Location: The training room at MSC.

Participants: The MTD, the VPHR, an external vendor, the VPF, the Training and Development Specialist, and the Analyst.

The MTD asked the Analyst to attend the presentation made by an external vendor for the customer-service training program. When the Analyst arrived she noticed that the training room at MSC was a large room near the cafeteria. It was decorated in mauves and grey. She also noticed that the lighting in the room made everyone look dead, except for the Training and Development Specialist. Her vivid makeup was stronger than the effects of the lighting. Those who were present in the room when the Analyst arrived were the Training and Development Specialist, the MTD, and the vendors. A vice president from the vendor company and another person from the vendor company were working diligently on the computer system. They were trying to set up the computer to be used with a focus group. Each individual would have a little device for entering responses to questions. The computer would automatically tabulate the responses, and a new question could then be asked. Another representative of the vendor company was talking with the Training and Development Specialist about what a neat system it was. Shortly thereafter, the Vice President of Finance and the Vice President of Human Resources arrived to see the presentation. Everyone sat at a table in the back of the room except for the two people who continued to work on the computer system. Introductions took place. The vendor then explained the computer program. By the time a few questions had been asked and answered, the computer was working, and everyone moved forward to work with the equipment. The vice president from the vendor company asked some questions, and all present entered their responses on the computer device. The vendor had just asked a forced-choice question about whether the president of the company or a manager of a department had more influence on customer service when the President of MSC walked in. He was planning to attend a second presentation that would be given by the vendors in the conference room. The President was introduced to the people from the vending company. Then there was silence.

The Analyst commented that everyone had just been rating the influence of the President on customer service. He laughed and so did the others. The vendors quickly summed up their presentation on customer service and prepared to deliver their second presentation with the company. Their second presentation was not related to the needs assessment or to training, so the Analyst left.

Event 39: Telephone call from the Manager of Training and Development to share information.

Date: December 15, 1989.

Location: Telephone call.

Participants: The MTD, and the Analyst.

The Analyst later heard from the MTD that after she left, the President of MSC had asked the Manager of Training and Development who she was. The MTD told him that the Analyst was doing the training needs assessment and asked the President if he would like a copy of the final report. The President said yes.[138]

The Analyst continued the conversation by asking the MTD about the final report. He said that he would like her to make some small changes in the report, such as taking out the word *strategic* in reference to goals.[139] He added that he would be out of town for some time. The Analyst suggested that they talk with the Vice President of Finance to strategize the most effective presentation of the report to the president. The MTD was pleased with that idea.

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[138] Organization politics: The MTD used the opportunity of a face-to-face contact to involve the President in the training project.

[139] Decision maker characteristics; analyst characteristics: The Analyst agreed to make the changes because they were relatively minor to her and they seemed to be important to the MTD.

Event 40: Delivery of the final report for Phase 1.

Date: December 26, 1989.

Location: Delivery to MSC.

Participants: The Analyst.

The Analyst revised the final report for Phase 1 a second time to reflect the changes that the MTD had requested. The Analyst then delivered the report (Appendix J) to the receptionist at MSC's offices.

Event 41: Meeting with the Vice President of Finance and the Manager of Training and Development to plan a strategy for gaining support to address training needs.

Date: December 28, 1989.

Location: Office of the Vice President of Finance.

Participants: The Vice President of Finance, the MTD, and the Analyst.

The purpose of this meeting was to plan a strategy for the presentation of the final report to the President and to talk about customer-service training. The VPF was pleased to help strategize because he really wanted to see some change happen within the company and because he wanted to get the training program for his area funded. The MTD was pleased to have the support of a vice president.

The MTD pointed out that customer service is something the company prides itself on and that the accounting area touches everyone in the company. The MTD suggested that a Customer Service Council be set up with the vice presidents of the company as members. The VPF said that he had thought of a different approach. What had worked for him in the past when he had wanted to get his ideas implemented was to use a two-pronged approach. The first prong was to make a presentation to the President of the company, and the second prong was to use a soft sell, by making what changes he could and by talking with other people in the company.

The VPF suggested that the MTD and the Analyst talk with the President of MSC. The VPF and the Analyst talked about how training could be used as a tool for getting the President's message out to the people in the organization. The Analyst restated that the VPF would position training as the President's megaphone, and the VPF said that was exactly what he had in mind.[140] The VPF further suggested telling the President that "these are the findings and that training can add value to the company, but to be effective, the training has to have his input." The benefits for the president should also be pointed out. After all, "training would be providing support to get his beliefs out there."

The VPF said that a source of power was that the Analyst was not selling any training and did not stand to benefit one way or the other from the decision that the president made.

The VPF asked if the project had the support of the Vice President of Human Resources. The MTD started hedging. The Analyst said that to be truthful, she was not certain about the amount of support that they had from the VPHR. The VPF suggested trying to get that support because he would expect the President to ask the VPHR what he thought.

The VPF suggested that the best option, without knowing where the VPHR stood on the training opportunities, was to try to get the customer-service training going. If the other officers saw results, then they might provide the support needed to get the larger program funded.

He also suggested restating the importance to the organization of the first phase of the needs assessment process. He said that it identified the issues that were on the minds of the executives and that information was power at MSC. The VPF then told a story about how he had been in a meeting when the new Vice President of Strategic Planning had proposed to the President that the role of the Vice President of Strategic Planning should include setting the objectives for everyone in the organization. Apparently, the President later asked the advice of the VPF. The VPF said that setting objectives for performance was a power position and that the President should not give away that power. The MTD and the Analyst agreed with the VPF that setting performance objectives and reviewing them was a real power position in an organization.

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[140] Interaction among organization politics, rhetoric, and training needs assessment: Training can serve as a rhetorical tool for communicating the President's message.

The MTD and the Analyst thanked the VPF for his time and his suggestions. They also talked about the Analyst's returning on another visit to analyze the jobs for the customer-service training.

The MTD and the Analyst walked to the human resources area, where the Analyst had left her coat. The MTD was excited. He said that from that meeting alone he had gotten his money's worth for the needs assessment project. It had given him access to an important decision maker at MSC. The MTD then mentioned the story that the VPF had told about the new Vice President of Strategic Planning.[141]

The Analyst asked the MTD what the next step was. Would they schedule a meeting with the VPHR to get his approval for the final report? The MTD said that the VPHR was out of town. The Analyst asked when he would be back and found out that he would not be in town until Friday. The MTD said that he could give approval to begin the job analysis for customer-service training for the accounting area because he was planning to fund the program regardless of whether or not it was funded as part of the needs assessment process. The Analyst recorded his decision on the PAT worksheet for Phase 2, Step 1. He also told the Analyst that he was getting a bid from another outside vendor to deliver the program. He and the Analyst talked about the fact that a $6,000 cost for the training would leave little financial benefit from running the program. The Analyst also asked if the MTD thought that another needs assessment, as proposed by the first vendor, was really needed. The MTD said no, he did not think it was needed.

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[141] Interaction among needs assessment; organization culture, system, politics, rhetoric; decision maker characteristics: The MTD seemed to be most pleased that the needs assessment had provided a source of information about the organization. Networking to get information was important at MSC.

The MTD agreed to contact the Analyst when the meeting date with the VPHR had been set up.

Event 42: Meeting with the Vice President of Finance to plan Phase 2 Job Analysis for Customer-Service Training.

Date: January 22, 1990

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance and the Analyst.

When the Analyst had phoned and asked for the meeting, the VPF said sure, that he could see her on Thursday. The Analyst showed the VPF the phases and steps of the PAT Model. The Analyst explained that the focus had been on Phase 1 and that with today's meeting there would be a shift to Phase 2. The VPF responded that this meant that we were making progress. The Analyst said that the focus of this meeting would be on customer-service training for accountants, and the VPF responded, "Great!"

Before beginning Phase 2, the Analyst said that she wanted to get agreement that this training was important to the VPF and that he would not only approve it, but support it. She mentioned that performance-based training required setting goals, supporting the training process, and evaluating the results. The Analyst said that, before they started, she wanted to be sure that he was committed to addressing this performance problem. The VPF responded that he did not see it as a problem, but rather as an opportunity. He had been working with his people to get them to see opportunities too. The Analyst said that often there were training and nontraining components of performance that had to be addressed. The VPF said OK.

The Analyst used the document phases and steps of the PAT Model to show the VPF the steps that would be involved in making customer-service training for accountants relate to the organizational performance. The VPF responded, "Wow, that is a lot of work . . . let's go for it!"

The Analyst said that the first step was to identify the work that was to be analyzed. The Analyst said that she wanted to get more details about how the VPF saw the problem. She reminded the VPF what he had said about the lack of customer service and how that was related to the bottom line. The Analyst also showed the VPF the performance value worksheet that he had completed when he had forecast the financial benefit of the program.

The VPF looked closely at the performance value worksheet and said, "Oh, it's all coming back now. Yeah, this is helpful." The VPF found it easy to remember that he thought that his people were giving customers the wrong information, but he had not remembered exactly his assumptions related to how much performance he had said that he expected.

The VPF said that what he had seen was sometimes customers "got way too much information" (he held his hands 2 feet apart to demonstrate), and then couldn't sift through it all to get the information that they really needed. Sometimes, the customer felt frustrated and did not know why, and other times the customer went away not knowing that they had gotten way too much information. With new computer technology, it was so easy to do this. If someone asked for the information grouped according to accounts, his person might ask if they wanted the information grouped by dates as well and by departments. Just trying to be helpful. It only took pushing a couple of buttons on the computer, and the customer would walk away staggering under the load.

Then the VPF asked the Analyst what she had thought of the vendors who were selling customer-service training. The Analyst said that they were pretty expensive given that he had forecast only a $10,000 gain in performance value. The VPF raised his eyebrows and said that was true. The Analyst also said that the vendors had proposed a program that involved a focus group of the people who used the accounting services at MSC. She wondered what would be gained from talking with the customers at this point. The VPF had previously mentioned that the customers did not always understand that they had a problem, much less why they had a problem. The Analyst wondered if the VPF could see the problem because he understood both the business needs at MSC and the accounting principles involved. The Analyst said if the customers could only describe getting poor service, then the focus group would not be useful because the VPF already had that information. As the decision maker with authority over the accounting group, he had pointed out the problem. It seemed to the Analyst that the next step was to identify what specifically was causing the problem. The VPF said, "Opportunity." Then he added that the Analyst had a good point. When he thought about it, he was not sure what value would be gained by having customers group in a room around a computer to agree that there was a problem. The VPF added that he did not need another group to take credit for a problem that he had already identified especially when they couldn't help solve it. He added that the company had previously used the computer technology to do strategic planning and that it had failed miserably. He was sure that it would be difficult to get funding for any program using that technology.[142]

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[142] Interaction among organization culture; decisionmaker characteristics; needs assessment process: This is an example of where the decision maker did not believe in a method for gathering data. Using the computer would most likely not result in funding for the program because of the decision maker's and the organization's past experience.

The Analyst also apologized for putting him in an awkward position when the vendors presented their proposal. She said that she had not known anything about the President coming to the meeting. The VPF said that was OK, "In my position, you have to take some risks."

The Analyst explained that this phase of the analysis focused on identifying and documenting the specific behaviors needed to accomplish the work. She asked the VPF if he had ideas about why customers sometimes got too much information or the wrong information. The VPF said he did not know why, but his guess was that it had something to do with customer service. He said that he tended to get involved at the end when he saw a problem or when he saw a customer walking away under a load. He felt that his staff was trying to be too helpful, but he was not sure about that. The Analyst said that the first step in analyzing job performance was to review the written documents related to the jobs. The Analyst asked the VPF whom he was thinking about for the training. He named several people. The Analyst reminded him that on the performance value worksheet he had identified 18 people. He picked up the document and went through it again. Then he said, "Oh yes, what was I thinking?" Then he remembered that he was now thinking of two training groups, where earlier he had considered only one. He began to write down names of individuals who would come to training.

He identified 11 managers and supervisors. The Analyst asked if she could get the written information about the jobs held by those people. The VPF said that he would get this information for her. The Analyst also said she would need to identify people that she could interview about the customer service process. The Analyst and the VPF agreed to identify the interviewees at the next meeting. The Analyst thanked the VPF and said she would talk with him the following week.

Event 43: Telephone call to the Vice President of Finance to obtain written documents for Job Analysis.

Date: January 29, 1990

Location: Not applicable.

Participants: The Vice President of Finance, and the Analyst.

The Analyst called the VPF to get the written documents, the Position Description Questionnaires, for review. During that conversation, the Analyst mentioned that she hadn't called earlier because she had been in Denver interviewing to become a member of a firm that did new-plant start-ups. The VPF was impressed and asked if the Analyst thought she would take the job. The Analyst responded that the work was interesting, but she thought that she would like to work in academia. The Analyst also said that though she liked the idea of driving a Jaguar or a Maserati like the consultants did, she thought that the job would involve too much travel. The VPF said that he was single and the job sounded pretty appealing to him.[143]

The Analyst and the VPF talked for a while about the strategy for training, and the VPF wondered if the Analyst had had a chance to talk to the President yet. The Analyst said that she had not but that the MTD and she were planning to talk with the Vice President of Human Resources next week. In the meantime, the Analyst would like to continue to work on the customer-service training need that the VPF had identified. The VPF talked about the approach being three-pronged one of continuing with his needs assessment and at the same time starting the ripples going and also "ascending the mount." The VPF said that he supported the idea of doing the job analysis and agreed to give the Analyst the Position Description Questionnaires. He said that his people had been working around the clock to get a report ready for Prine, Inc., and that he would like to have interviews set up for the 7th or 8th of February. The Analyst agreed and they talked about the Analyst picking up the PDQ's from the Human Resources Department.

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[143] Analyst characteristics; decision maker characteristics: The Analyst thought that the VPF would be impressed that she was being interviewed by a successful organization. She also knew that he was interested in the information because he was thinking of changing careers.

Event 44: Meeting with the Vice President of Human Resources and the Manager of Training and Development to review Phase 1 of the needs assessment project.

Date: January 29, 1990

Location: The fishbowl at MSC.

Participants: The Vice President of Human Resources, the MTD, and the Analyst.

Prior to the meeting, the Analyst took the MTD to lunch to make sure that they were "on the same wave length." Before lunch, the MTD asked if the Training and Development Research Center was buying. The Analyst said she wasn't sure, so he suggested that they go someplace reasonable.

After ordering, the Analyst and the MTD talked about the agenda for the meeting. They decided to start with a discussion of the progress made so far. The MTD said that he had given the VPHR a copy of the Final Report for Phase 1, but he had not shared the performance value forecasts because he thought that the VPHR might have questions about the performance value calculation process that the Analyst would be able to answer.

The MTD and the Analyst also talked about where they wanted to go with the needs assessment—specifically, they thought that the next step was to get the President of MSC involved. When the Analyst reminded the MTD that the President wanted to see the final report for the project, the MTD was excited. He had forgotten about that.

They talked about who should be at that meeting and agreed that it would be desirable not to have the VPHR at the meeting with the President. The MTD wanted to meet with the Analyst and the President.

The MTD also mentioned that he didn't think that the VPHR had understood the first phase of the needs assessment process: "He doesn't seem to know why it was important and why we didn't just get a survey instrument off the shelf." The Analyst said that at the meeting with the VPHR she would again speak about the importance of knowing the real needs of the organization if training was to connect to the organization's bottom line.

When they returned to the company, the Analyst made copies of the report. At exactly 1:00, the VPHR came down to ask the MTD if he had made arrangements on where to meet. The MTD said that he had assumed that we would meet in VPHR's office, but the VPHR said that he had a project spread out in his office, so the MTD rushed off to find a meeting place. The meeting was held in the fishbowl.

While the MTD, the VPHR, and the Analyst were walking to the fishbowl, the Vice President of Finance walked up and handed the Analyst a manila envelope (containing the PDQ's) marked Confidential. The VPHR scowled. Then he asked the VPF if he had a document that was needed by Prine, Inc. The VPF responded that he was not carrying the document at the moment, but if the VPHR wanted it, he would be happy to get it for him later that afternoon.[144]

Because the Analyst walked into the room first, she sat with her back to the glass wall, hoping to not be distracted by the activities in the lobby. The VPHR sat on her left side and the MTD sat on her right. The MTD started the meeting by saying that they were here to talk about the steps of the needs assessment that had been taken so far. The VPHR asked where they were in the needs assessment process and the Analyst gave him and the MTD each a copy of the phases and steps of the PAT Model. The Analyst explained that the focus of this meeting was on the last step of the first phase. She said that the report she had submitted had identified the real performance needs of the company as identified by the decision makers at MSC and the training and nontraining options for meeting those needs.

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[144] Analyst characteristics; decision maker characteristics: The Analyst did not know what was wrong, but she could feel the tension. She could not tell if the VPHR did not want her to be getting information from the VPF or if the two vice presidents were tense about something else. The Analyst also knew that the VPHR's mood did not bode well for their meeting with him.

The VPHR flipped through the report and commented (direct notes were not taken at this time because it did not seem appropriate): "This is not acceptable, this is just not acceptable. After all this time, and this is just what I told you when you started." The Analyst explained that the needs assessment had taken a long time because when she had started the process, the company was in the middle of changing its strategy. She also pointed out that last summer the company did not have a working strategic plan and only recently had the company become more focused. The VPHR nodded his head yes and paged through the report. For the next hour, he flipped through the pages and, seemingly at random, challenged the content. The Analyst responded to his comments, he would agree, and then he would find another place to raise a concern. He said the report had taken too long to complete, and he had not gotten enough for the $10,000 it cost. He then asked the MTD exactly how much this project had cost. The MTD answered $2,300. The VPHR said that he had just signed another $10,000 requisition for the project. The MTD explained that the money had been used to support a number of projects by the interns—an evaluation project and a curriculum project in addition to the needs assessment project.

The VPHR said that it was not a good report. The Analyst responded by saying that based on her experience and her knowledge of the needs assessment field it was a good report. She also mentioned that it had been reviewed by another expert in the needs assessment field (her advisor), who had commented that it was a good report.

The VPHR then wanted to know where the numbers for the cost-benefit forecast came from. The Analyst explained that the Vice President of Finance had made the determinations. He had made all the assumptions and he had used the company financial information in making the estimations. The Analyst also explained that the Vice President of Finance had used the most conservative numbers possible. The VPHR asked about the assumption that two good decisions a week could be gained with decision making training. The VPHR said he challenged that number. He wanted to know why it would not be 10 or 12 good decisions. The Analyst explained that the Vice President of Finance had wanted to make a conservative estimate and that what the numbers really said was if midlevel managers did make two good decisions a week and if the other assumptions were true, then the figure in the report would be the financial payback.

The VPHR wanted to know why the VPF had been chosen to estimate the numbers, and the Analyst explained that he had been chosen because of his position in the company but that if the VPHR wanted to make estimates, she would be pleased to work with him to do that. Further, if he disagreed with a figure, it should be challenged. The VPHR said that he thought the numbers were just pulled out of thin air. The Analyst explained that the VPF had looked at a number of records to make reasonable estimates. The MTD did not say a word. The VPHR's voice kept getting louder and louder.

The VPHR flipped through the report again and wanted to know how much of the needs assessment was left to do. The Analyst explained that it was about two-thirds done. The MTD said that it was at least four-fifths done.

Then the VPHR flipped through the report another time and asked the Analyst if she thought that training would solve all the problems. The Analyst pointed out that that she had identified nontraining issues, and the VPHR flipped to those. He discounted all of the recommendations by saying that the company had reorganized, so none of the recommendations applied. He specifically mentioned the problem with marketing not providing needed information. The Analyst explained that even though the Marketing Department had been subsumed under lines of business, that did not mean that the problems with marketing had been addressed or that the sales people were getting the necessary marketing information. The reorganization only meant that the problem had been decentralized. The VPHR nodded agreement, and he flipped through the report again. Then he said that the training needs that had been identified were exactly the ones that he had identified 6 months earlier. The Analyst explained that no one person had exactly given those four training needs but that they had come from talking to a number of people, observing what went on in the company, and reviewing organizational records. The Analyst also pointed out that when the VPHR had seen the interim report, he had expressed the opinion that the identified training needs had "hit the nail on the head."[145]

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[145] Organization characteristics; analyst characteristics, decision maker characteristics: The Analyst recognized that the amount of time lapse was an important issue to the VPHR. She did not feel that she should explain that the time span was partly a function of the difficulty in reaching

The VPHR then wanted to know, "What if people got training in project management, would that improve the management of projects?" He mentioned the computer department. The Analyst knew that this department supposedly had the most knowledge about project management but was continually behind schedule on projects. She responded that she had identified performance problems and that only part of the performance problems could be addressed with training. She drew a figure showing that an entire performance problem was made up of training and nontraining components. The VPHR did not look at the figure.

The VPHR was then upset that the Analyst had talked to people in the company and said that it should have been possible to identify the needs without talking with decision makers. The Analyst said that the decision makers in the organization are the ones who know where they want the company to go. Further, at MSC, this information was not recorded. Although the company had written information about its history, nothing was written about goals. If training was to be done to help the company reach its goals, then that training had to be based on understanding what the organization's goals were. The VPHR still didn't think that the Analyst should have talked with decision makers.[146]

The Analyst said that clearly something was off-base here and asked what the VPHR had envisioned for a needs assessment. His answer was, "I

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people, partly a function of cancelled meetings, and partly a function of the MTD sitting on the report for about a month.

[146] Analyst characteristics, decision maker characteristics: The Analyst also wondered why the VPHR did not want her to talk with decision makers. If he wanted to promote training, one would think he would have been pleased with the networking.

could be crass and ask you, since you are such a self-professed expert, what could I have done." The Analyst explained that there were four ways to gather information—observation, interview, records, and questionnaire—and that she had used three of the four. He wanted to know if the Analyst had sat in different people's offices and observed them working for an afternoon or if she had attended meetings. She responded that although she had not done those things, she had arrived early for all her meetings and had spent time just observing people and that she had waited between meetings in the cafeteria were she had also observed people working and meeting.

The VPHR flipped through the report again and asked if the Analyst thought that training accountants was the biggest need at MSC. The Analyst answered no, not in her opinion, but that such training would provide a good prototype for attaching training to the bottom line, mostly because the VPF was willing to set goals for his department, to support the training effort, and subsequently to evaluate the results.

The VPHR again flipped through the report and said that it was not acceptable. The Analyst agreed that the time taken to do the needs assessment had been long and stated that this was the longest that she had ever worked on a needs assessment project of this type. She said that it took a long time to contact people at MSC and that it took three meetings alone to estimate the performance values. Because the VPHR discounted the performance values, he also discounted the four meetings.[147] The Analyst said that she thought that the report was good and reflected the company's needs. The VPHR closed the report and said that he was not going to talk about it any longer, and that he was not happy. He would be expecting a recommendation from the MTD on what to do next.[148]

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[147] Decision maker characteristics; organization rhetoric: The Analyst knew that it would not be good for the career of the MTD to say that the needs assessment took so long because the MTD

The VPHR left the room, and the Analyst waited until he was out of earshot before speaking. Then the Analyst looked at the MTD and said, "Wow!" The MTD said that he thought that the Analyst had done a very good job. She said she didn't know what she could have done differently. The MTD didn't know either, but he thought that the VPHR might have preferred that she use a questionnaire to identify the training needs.[149] The MTD asked the Analyst to

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was out of town so much and claimed that he had not had opportunities to share the information with the VPHR.

[148] Interaction of decision maker, analyst, and organization characteristics with the needs assessment process: The MTD did not say much during this meeting. The Analyst did almost all the responding to the VPHR. Much of the time the VPHR was speaking loudly in put-down language in a room visible to the public. He would seem to agree with the Analyst, then he would flip to another part of the report and get angry again. The Analyst felt that his behavior was inappropriate and rude. She took part in the conversation only because she felt that this meeting would have an effect on the MTD's standing in the firm.

[149] Analyst characteristics: The Analyst thought that the VPHR was more interested in having a forum for venting his anger than in solving a problem. The Analyst wondered if his anger really had anything to do with her report. She believed that the VPHR would have found a problem with any method of collecting information. The analyst also recalled that the VPHR had communicated at the beginning of the project that questionnaires should not be used in gathering data.

make up a form that could be used with customer service and to get out of the company quickly before another outburst.

Event 45: Telephone conversation with the Vice President of Finance about the meeting with the Vice President of Human Resources.

Date: January 31, 1990.

Location: Phone call.

Participants: Vice President of Finance (VPF) and the Analyst.

The Analyst talked with the Vice President of Finance and told him that she had met with the Vice President of Human Resources and wanted to tell him about it. He asked how it had gone and the Analyst said not well. He mentioned that he had spoken with the MTD and gotten a similar message.

The Analyst told the VPF that the VPHR had challenged the performance value numbers and the customer service need and that she was concerned that the VPHR might challenge the VPF at a staff meeting. The VPF was glad to know what was going on and asked questions about what exactly had happened. The Analyst told him that the VPHR had challenged the amount of time that it had taken to complete the analysis, the numbers, and the methods. The Analyst also mentioned that the VPHR had given two messages—that training should be connected to the bottomline, but that she should not talk to decision makers. It seemed to be a no-win situation. The VPF wondered why the VPHR did what he did. The Analyst wondered if it had anything to do with the VPHR's reaction at seeing the VPF give the Analyst information. The VPF said he had been wondering about that too. He said that the predecessor of the current MTD had come to him with a similar story of being put in a no-win situation and being forced out and that the VPF had said at that time that he could only listen. The VPF wondered if the VPHR kept stopping projects because it kept him in power. He noted that it would be interesting to find out the company's response—if they kept letting the VPHR start projects and then letting him not follow through. That would be saying something. He wondered if the company would let the VPHR get away with it. The Analyst said that the MTD had talked about recommending the customer-service training. The VPF stated that the VPHR was unlikely to challenge him publicly because what could he say to a line manager who wanted training? He also pointed out that he did not work for the VPHR and that he wanted the training done.

The Analyst asked if she could come in and interview some of his people who were experts on customer service and some who were not experts as soon as possible. He agreed and gave her the names of three people. He mentioned that he had already announced at a staff meeting with his department that this project was under way.[150]

The VPF said that his sense was that the difference between the people who did good customer service and those who did not was an attitude—some people had a helpful attitude and others were information hoarders. When someone asked for information, the hoarder's response was, "Why do you want the information? Such people challenge the person's right to information."

The Analyst and the VPF agreed that the researcher would check this possibility out to see if she could confirm it. The VPF noted that he had selected people based on their experience and the feedback that he had gotten from others about their responses. The three interviewees would be the Manager of Product Line Accounting, the Manger of Corporate Accounting, and the

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[150] Organization politics, rhetoric: The VPF had committed publicly to the customer-service training project. If the project didn't take place, he stood to lose face.

Manager of Cash Management. The Manager of Product Line Accounting had the most ambassador-like role. He had worked in other departments. The Manager of Cash Management, on the other hand, had more of an attitude of resistance and professional challenge when asked for something. Her attitude was, "Define the problem or I won't do it."

The Analyst asked about who the customers were for the accounting area, and the VPF replied that the company's subsidiary was the most customer-like entity because they were another company. The parent company was also an important customer, and there were customers within the company.

The Analyst said she would conduct the interviews and get back to the VPF. The Analyst also thanked him for his help.

Event 46: Telephone conversation with the Manager of Training and Development about progress in gathering information.

Date: February 2, 1990.

Location: Telephone call.

Participants: Manager of Training and Development and the Analyst.

The Analyst telephoned the Manager of Training and Development to tell him that she had permission to interview the people in the accounting area to gather the information needed to make up the questionnaire.

The MTD said that he had met with the VPHR on Tuesday and had recommended customer-service training. The MTD reported that the VPHR had questioned the suggestion, saying that he thought it was not really a customer service problem but one of communication. According to the MTD, the VPHR said that his concern was that he had not gotten anything from the needs assessment process to date. The MTD said: "I just don't understand him, he seems to have lost the big picture. Maybe he is just under too much pressure from doing things he doesn't like, such as dealing with law suits in the regions."

The Analyst pointed out the both she and the MTD had been put into no-win situations. If she gathered information from people, she was talking with them; if she didn't, then how could training be connected to the bottom line?

The Analyst agreed to contact the MTD when she had additional information to report.

Event 47: Telephone calls to financial professionals to set interview appointments.

Date: February 2, 1990.

Location: Telephone.

Participants: The Manager of Cash Management, the Manger of Product Line Accounting, the Manager of Corporate Accounting, and the Analyst.

The Analyst telephoned each individual to set an interview time. Each person indicated that he or she had been expecting the telephone call based on earlier conversations with the Vice President of Finance. One-hour interviews were scheduled on February 6 with each individual.

Event 48: Telephone call from the Director of the Training and Development Research Center.

Date: February 5, 1990.

Location: Telephone.

Participants: The Director of the Training and Development Research Center and the Analyst.

The Director of the Training and Development Research Center telephoned the Analyst and informed her that the Manager of Training and Development had been released from his position at MSC.

Event 49: Telephone calls to financial professionals to cancel the interviews.

Date: February 5, 1990.

Location: Telephone.

Participants: The Manager of Cash Management, the Manger of Product Line Accounting, and the Manager of Corporate Accounting, and the Analyst.

The Analyst phoned the Vice President of Finance to inform him of the MTD's departure and to ask him what to do about the scheduled interviews. He was out of the office for the next 10 days. The Analyst then contacted each person who was scheduled for an interview and informed each individual that something had come up and that she would need to touch base with the Vice President of Finance before continuing further with this project. She cancelled the interviews and informed each individual that she would call back later.

Event 50: Telephone conversation with the Vice President of Finance to determine project status.

Date: February 20, 1990.

Location: Telephone.

Participants: Vice President of Finance and the Analyst.

The Analyst asked the VPF if he knew that the MTD was no longer with the company. He said that he had talked with the VPHR and had heard that. The Analyst said that it left the needs assessment project up in the air. There was enough information to complete the research project, so the project could be considered complete. Or if the VPF desired it, the Analyst would finish determining the customer-service training needs for his area.

There followed some discussion about why the MTD was let go. According to the MTD, the problem was time, that he had not accomplished anything in the 18 months that he was at MSC—at least according to the VPHR. The VPF asked if it seemed to be a question of the quality of the work, and the Analyst said that had not seemed to be the case. The VPF said that this was the second Manager of Training and Development that the VPHR had let go. The first person had come to the VPF and said that the VPHR was lying to him, and then that training manager was not around.

The VPF reported that the VPHR had said that the Manager of Training and Development would not be replaced. The VPHR had also told him that he didn't think that customer-service training was needed but that communication training was. The VPF said that his question was, What was the point of doing the needs assessment if the VPHR had the answer?[151]

The Analyst explained that originally customer-service training had been identified because it could serve as a prototype for the kind of performance-based training that the Manager of Training and Development wanted to implement at MSC. The plan had been to identify a performance need, tailor the training to meet the need, and then evaluate the performance after training. It seemed to the Analyst to be a waste of resources to complete the needs assessment if the expectation was to then purchase a generic training program with no follow-up evaluation. On the other hand, the Analyst could finish the needs assessment project if this work was desired by the VPF. In making this decision, the Analyst suggested that the VPF also needed to consider the position that this put him in with the VPHR. The VPF said that he would like the Analyst to finish the project.

The Analyst described the next phases of the process, which included interviewing people, reviewing the literature, and designing a survey. The Analyst and the VPF agreed that the VPF would serve as the decision maker for the last two phases of the needs assessment project. The understanding was that, depending on the findings, the VPF would personally present the training during regular meetings with his staff, or he could seek funding for a more extensive program. The Analyst asked the VPF if he would talk to the VPHR about her presence in the company. He said that he would not seek out the VPHR, but that if he ran into the VPHR, he would explain. If the VPHR asked about it, the VPF was planning to say that because the MTD was not being replaced, the Human Resources Department was no longer in the business of providing the kind of training the VPF needed.

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[151] Interaction of organization politics with the needs assessment: The issue being raised in this instance was what criteria are used in determining the needs. This is a power issue at MSC. The VPHR, after setting in motion the needs assessment process, decided that he knew the answer. The VPF challenged this power play.

The VPF had just come back from Prine, Inc., so the Analyst asked him what the message had been from the parent company. He said that their message was, "You slipped, but now you have a plan." The head of the parent company also said, "You've had profits for 12 years without understanding your business—imagine what will happen now that you understand it." Of course, they had earned no bonuses last year. Prine, Inc., did not want to run MSC. Their attitude was, "We will give you the resources and if you don't make it work, you're gone."

The Analyst agreed to schedule the interviews again and get back to the VPF with information.

Event 51: Construction of a work behavior analysis plan.
Date: February 20 to 28, 1990.
Location: The Money Systems Company and the library.
Participants: The financial professionals at MSC and the Analyst.

The Analyst recorded on the PAT worksheets, Phase 2, Step 1, that the work to be analyzed was customer-service training for financial professionals.

The Analyst then reviewed the work factors and analysis table contained in Phase 2, Step 2, of the PAT Model. Because customer service at MSC is nonobservable knowledge work, the Analyst selected subject matter analysis as the tool for analyzing the work behaviors. This tool is described in the book Performance at Work by Swanson and Gradous. In completing Phase 2, Step 3, of the PAT Model, the Analyst determined that the information contained in MSC's Position Description Questionnaires included the job description and task inventories for the jobs. The Analyst used the specific work behavior analysis method of subject matter analysis to determine the knowledge, skills, and attitudes involved in serving customers at MSC. The completed PAT worksheets for Phase 2 are in Appendix G. The documentation for the subject matter analysis, including the subject matter analysis plan, the behavior search and analysis, the literature search and analysis, the synthesis, and the subject matter description, are contained in Appendix K.

Event 52: Meeting with the Vice President of Finance to review Subject Matter Analysis.

Date: February 28, 1990.

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance (VPF) and the Analyst.

Prior to meeting with the VPF, the Analyst had to register with the MSC's receptionist. Because the VPF was delayed in an unexpected meeting, his secretary sent a financial manager to escort the Analyst to the VPF's office. While the Analyst waited, she was aware that she was in a position highly visible to the Vice President of Human Resources, and because she did not want to become involved in a discussion with him, she moved across the room to look at the display case. The Analyst noted that nothing had changed in the display case in the past 3 months. The Manager of Corporate Accounting met the Analyst, and they were on their way to the VPF's office when the Analyst noticed the VPHR walking down the hallway. The Analyst focused her attention toward the Manger of Corporate Accounting until the elevator arrived.

When the Analyst arrived at the office, the VPF was waiting. The Analyst informed him that the VPHR had seen her coming to his office. He replied, "That is all right, I'm not afraid of the VPHR." The Analyst showed the VPF the phases and steps of the PAT Model. She told him that the purpose of the meeting was to review the work that had been done on Phase 2, Steps 1, 2, 3, and 4. The Analyst reminded the VPF that he had identified the customer service given by accountants as the work to be analyzed. The Analyst showed the VPF the subject matter plan and explained that she had used a systematic process for analyzing the specific work behavior. The documentation for the subject matter analysis is contained in Appendix K. She then placed the individual components of the subject matter analysis on the VPF's desk. She showed him the literature review materials and said that it provided background so that the Analyst could benefit from what others had learned about customer service. She also showed him the interview notes and reviews of the PDQs.[152] He said that he was impressed. The Analyst then showed the VPF the synthesis models. The Analyst gave the VPF a copy of the dichotomy, and they spent some time reviewing that document. The Analyst also held up the two-axis matrix and showed the VPF that more of the cells in the exemplar's column contained positive examples of performance. The specific text in this document was not reviewed.

The Analyst gave the VPF a copy of the subject matter analysis. He commented that he was impressed that she had been able to do so much work in such a short time. The Analyst responded that she had been concerned with something that the VPF had said during their last meeting about the process going too slowly, so she had really worked to get him this material quickly. The VPF said that he could not remember the comment, but that he had been impressed with the Analyst's work and that he would like to write a letter of recommendation to someone. He said that the letter would be a long one, and the Analyst said that she appreciated knowing that.

The VPF and the Analyst then reviewed the subject matter analysis word by word. The VPF wanted to know if the Analyst had read in 1 week the five books listed in the appendix. The Analyst responded that she had read some of them all the way through, but for some she had read only the pertinent chapters and had skimmed the rest.

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[152] Analyst characteristics: The Analyst did not want the VPF to review in detail the interview notes because she wanted to protect the rights of the individuals who had been interviewed. However, she did want him to know that she had systematically done the work.

The VPF began to read the subject matter analysis. He commented, "Ah, wonderful!". while he was reading. Then he said that he had an example of an internal customer who had been frustrated with him earlier. He had realized during a meeting that this internal client was not served by the system because the client had a support role and the accounting function had been organized by product line.

There was some discussion about who the client was. At MSC, the support functions are demand driven. A vice president swoops in and intimidates a person. In another culture, the vice president would first check with the vice president who supervised the person. There were also culture issues because the vice presidents as a group show public agreement, but then sabotage one another. There was a struggle to control, but no responsibility. It was hard to give good customer service in that environment. [153]

The VPF continued to read the subject matter analysis. He commented: "We could have brainstormed all year and not come up with the idea that customer service should include evaluation after the fact. This is great." At another point, he commented, "I didn't know that." At yet another point, the VPF suggested specific words that would communicate better.

At one point, the VPF said: "If I do this, I will be the inspiration. I need to be a one-man show. This kind of thing [the subject matter description] is just what I need. This uses words that I wish I had." At another point the VPF commented, "This will be the content for the training. I love it!" This comment was made after the VPF read a description of the specific behaviors accounting professionals at MSC used to provide good customer service. After reading through the subject matter analysis, the VPF wanted to know what was next. The Analyst said that subsequent training would deliver his message, so the first thing to do was to check again if anything in the subject matter analysis did not fit the message that the VPF wanted delivered. The VPF said: "No need to check. When we first talked, I knew that something was wrong—that there was a performance problem. Now I understand why there was a problem. This is amazing."

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[153] Organization culture: This description of the culture matched what the Analyst had seen.

The Analyst said she was pleased and she pulled the phases and steps of the PAT Model out from the bottom of the pile of papers again. The Analyst stated that the subject matter analysis contained the anecdotal information specified in Phase 2, Step 4, of the PAT Model.

The Analyst said that the next step was to move on to Phase 3 of the PAT Model. She described how the focus in the third phase would be on determining which employees needed training and what training they needed.

The VPF said that he had informed his people about this, and they understood what was coming. In fact, some of them were getting impatient. The Analyst and the VPF discussed sending the potential trainees a customer service survey. The VPF agreed to identify the potential trainees, and the Analyst agreed to develop the survey before the next meeting.

As the Analyst was leaving, the VPF said that he was getting a lot out of this and he wanted to make sure that the Analyst was getting something out of it too. The Analyst said that she thought that they worked well together. The

Analyst also asked the VPF if he would be willing to review her research project after the needs assessment project was complete. He said yes.

Event 53: Meeting with the Vice President of Finance to plan Individual Analysis.

Date: March 7, 1990.

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance and the Analyst.

The Analyst arrived at the meeting with a draft copy of the survey in hand. The VPF told her that since their last meeting, something interesting had happened. Later in the afternoon after their last meeting, the Vice President of Human Resources had come to the VPF's office and wanted to talked with him. The VPF said, "The VPHR said that he had seen you in the hall; that you should not be here, that we didn't get what we wanted from you, that you are done." The VPF had said in reply that he had put in a lot of time on the project and that he wanted to get a training plan out of it. The VPHR reportedly then alluded to the Analyst lying about interviews, saying that she had reported conducting interviews when he knew that she couldn't have. He also said he had fired the Manager of Training and Development because he had lied. According to the VPHR, the MTD had said that he was ill. The VPHR had driven to the MTD's house in another suburb and because of the presence of tire tracks in the snow, decided that the MTD could not have been ill. The VPF said that the VPHR had continued to talk. The VPF also said that he had quit listening to the VPHR's ranting. The VPF said that he knew the Analyst would be interested in this. The Analyst replied that she had not lied about any of the interviews and, in fact, had diligently typed up her interview notes for research purposes. She had left a paper trail that would later be reviewed by experts. The VPF said he had seen the Analyst's work and was pleased to be working with her.[154] The VPF said that one of his biggest fears in the organization was that sometime in the future he would have a reporting relationship with the VPHR. The Analyst asked which way the relationship would be. The VPF said that it was likely that the VPHR would report to him. He said that he would not be willing to take on that responsibility unless he had permission to terminate the VPHR.[155]

The VPF and the Analyst then discussed a strategy for getting information about individual characteristics and capabilities. They decided that the Analyst would send a letter to each person asking for participation. Prior to that letter, the VPF would announce the survey at a meeting. He would say that the survey would be used to gather information for customer-service training. The Analyst lobbied for measuring group, rather than individual, performance in order to preserve individual anonymity, especially in the current organizational climate. The VPF agreed. Because it was important to the VPF that the training reflect his message, the Analyst suggested that he review the letter and the survey prior to its being sent out. He agreed that this was a good idea. The Analyst agreed to send him copies of the letter and survey for his edits. It was decided that the survey would be mailed by March 19, with return requested by March 23.

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[154] Interaction among analyst characteristics; decision maker characteristics; organization politics, rhetoric, system, culture: The Analyst perceived that the VPF believed her work because he had seen her job-analysis work at the previous meeting and because she had responded honestly to his questions. Because of that strong positive impression, the VPHR's rhetoric about the Analyst's performance was not believable. The timing of events played a role in the outcome of the needs assessment.

[155] Organization system, politics; decision maker characteristics; analyst characteristics: Because of the needs assessment process, the VPF had some experiences with the VPHR. According to the VPF's statements, he was choosing to believe what he had observed of the Analyst's work rather than the statements of the VPHR. The experience of the needs assessment had influenced the organization system and the interaction between the VPF and the VPHR.

Event 54: Individual analysis to determine which employees need training and the kind of training they need.

Date: March 7 to April 6, 1990.

Location: The Analyst's office.

Participants: The Analyst.

The Analyst drafted a copy of the survey and the letter and sent them to the VPF for his review. The Customer Service Survey for Financial Professionals at MSC was designed to gather information about the characteristics and capabilities of the potential trainees. The survey was designed to gather the information needed to complete the PAT Model Phase 3, Steps 1, 2, and 3. The Analyst revised the survey to incorporate the changes suggested by the VPF, duplicated the survey and letter, and mailed them to the participants on March 19. (Copies of the letter and survey are in Appendix L.)

The description of the Analyst's activities related to collecting the surveys, analyzing the data, and reporting the findings are contained in the document titled "Analysis of Customer Service Survey for Financial Professionals at MSC." (See Appendix L.)

The Analyst used the collected survey information to complete Phase 3, Steps 1, 2, 3, and 4, of the PAT Model.

Event 55: Meeting with Vice President of Finance to review the individual analysis results.

Date: April 9, 1990.

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance and the Analyst.

The Analyst met with the VPF to discuss the survey results and the final report. The Analyst gave the VPF a report titled "Analysis of Customer Service Survey for Financial Professionals at MSC." (See Appendix L.) The VPF said that he had hoped that the survey would provide some good and bad examples of customer service that could be included in a funding request. The survey responses did not include appropriate examples. After some discussion, the VPF and the Analyst recognized that the survey examples were not appropriate because the financial professionals had not provided outstanding or poor examples of customer service. They had not described customer service at all. The VPF thought that the statement in the findings that the examples did not describe the situation from the customer's perspective was key. Clearly, his staff did not understand the importance of the customer.

The VPF and the Analyst agreed to meet on April 16 to discuss the final report. The VPF wanted to submit the final report to the President in an effort to get funding for the training programs. The VPF also said that he wanted to share the first four pages of the survey results with his staff.

Event 56: Meeting with the Vice President of Finance to plan a strategy for presentation of the final report.

Date: April 16, 1990.

Location: The office of the Vice President of Finance.

Participants: The Vice President of Finance and the Analyst.

The VPF said that he had not shared the results of the survey with his staff because the agenda for the staff meeting had been too full. He said that this project had really changed his mind about training. He said he saw how training could directly affect the bottom line and how training could change the culture, which would then affect the bottom line. He commented, "To the extent we have better trained financial professionals, then we have a better organization." He also said, "With better training we have more agility and can respond better to change." The goal of the final report for the project was then discussed. The VPF's goal was to bring the President into the process. He said that the Vice President of Human Resources was dangerous and that the VPHR had control over incentives in the organization. The Analyst noted that training could be directed at meeting future needs, improving performance, or addressing current performance needs (or organization problems). She said that customer-service training would address a current performance need. It would also address a future performance need, given the perspective that financial professionals would need to become more proactive contributors to the organization's goals.

In discussing a strategy for the final report, the VPF stated that the President had been willing to take strong action. For example, the President had led two reorganizations, which included eliminating both of the founding fathers. The VPF hoped that he could get funding for the customer-service training and thought that his area might serve as a starting point for the other training programs that had been recommended earlier in the needs assessment process.

The Analyst asked the VPF if he was still willing to address the nontraining components of performance. He said yes. The VPF added that he thought it was important to measure performance by first testing the perceived customer service level of his staff, then introducing the training, and finally testing the organization perceptions of customer service again. He also said that, given the information on the surveys, he would modify the performance appraisal forms so that customer service was more clearly defined. He also planned to introduce an incentive for outstanding customer service—a symbolic award.

Event 57:	Meeting with the Vice President of Finance to review the final report.
Date:	April 27, 1990.
Location:	The office of the Vice President of Finance.
Participants:	The Vice President of Finance (VPF) and the Analyst.

The VPF reviewed the final report. The final report for the project is contained in Appendix M. The VPF agreed with everything stated in the report. He said that it was critical that this report be sent to the President and that his recommendation to the President was that this training was absolutely vital and that he needed the resources. If the President said no, then the VPF would try to find the necessary resources himself. He said that he had done that kind of thing before. He would campaign for this training. The VPF said, "I will follow the golden rule: The person with the money makes the rules."

The Analyst said that she also wanted to ask the VPF some questions about the results and the process of the needs assessment. She asked if he had been involved in the process. The VPF laughed and said yes. The Analyst then asked if the VPF felt that he had accurate and sufficient information for making decisions about the contributions that training should make to the performance needs at MSC. The VPF responded yes and that he was going to try to get the resources. The Analyst asked the VPF whether he had received sufficient information for designing, developing, implementing, and evaluating training. The VPF said that for the customer-service training sufficient information had been gathered, and, in fact, he was ready to deliver training if he had to or find a vendor to deliver the content identified earlier. He said there was not enough information for the other training programs—but that was because the decision had been made to complete the analysis on the customer service training first.

The Analyst asked him to review her research. He agreed to do so and asked exactly what the research was about. The Analyst explained that she was describing a systematic process for conducting a training needs assessment and also was documenting what happened during the needs assessment process. The VPF said that doing the needs assessment had changed his view of the organization and the role of training.

The Analyst described the rules of influence at MSC and the organization characteristics notes. (See Appendix N.) The VPF responded that he thought the Analyst had described the organization exactly.

The VPF suggested that the Analyst might also have the President review her research. The Analyst agreed to call the President and share both the final report and the research with him.

Event 58: Telephone call to the President of MSC to arrange a meeting.

Date: April 27, 1990.

Location: Telephone call.

Participants: The President of MSC and the Analyst.

The Analyst telephoned the President of MSC. She identified herself at a research assistant at the University of Minnesota's Training and Development Research Center. She then told the President that she had been conducting a needs assessment at MSC and would like to set an appointment to give him the results. A meeting was scheduled for May 11.

Event 59: Meetings with the President of MSC to review the final report.

Date: May 11 and 14, 1990.

Location: The office of the President of MSC.

Participants: The President of MSC and the Analyst.

The meeting was divided into two parts because the President had a conflict shortly after beginning the meeting. The President revised his appointments so that the meeting could be continued on the following Monday.

The Analyst said the purpose of the meeting was to review her work and to give the President information and feedback. The Analyst stated that over the last year she had worked at MSC determining training needs. The President responded that he had seen her around the building and was glad to meet her. The Analyst said that she had begun working for the MTD and had done some work with the VPHR and the VPF. She added that she was aware of the difficulties between the VPHR and the MTD but wanted to focus this meeting on the needs assessment. The Analyst also said that the VPHR had talked with the VPF and that the VPF knew that the Analyst planned to talk with the President about the results of the needs assessment and the research.

The Analyst presented an overview of the project and gave the President a copy of the PAT worksheets. They reviewed the phases and steps of the PAT Model, and the President said that it made sense to him: "It is logical." The Analyst also identified the training needs of the company and briefly summarized the final report. The Analyst outlined the four training options and explained why she had recommended the customer-service option. The President replied that the VPF was an individual who wants to do things, so that was a good place to start. The President asked the Analyst to identify the next step. The Analyst said that, for research purposes, she would like him to make a decision. Given the information he had just heard, the President could choose to do no training, choose to have customer-service training only for the financial professionals, choose to implement the training and nontraining solutions suggested in the report, choose to implement customer-service training as a starting point for other training, or choose to implement only the training components from the report.

The President responded that implementing the training and nontraining solutions would be his choice.

The Analyst said that she wanted to ask the VPF about the results and the process of the needs assessment. She then asked the President if he had been involved in the process. The President said yes. The Analyst asked if he had accurate and sufficient information for making decisions about the contributions that training should make to the performance needs at MSC. The President responded that he had made a decision. The Analyst then asked the President whether he thought the information was useful for designing, developing, implementing, and evaluating training. The President said yes.

The President reviewed the Analyst's written reports over the weekend and on the following Monday said that he agreed with "99 percent of what was in the report." His only thought was that the organization had changed over the year in which the needs assessment had been done. The Analyst asked what changes had occurred. The President responded that decision making was being done lower in the organization now. The Analyst asked if that was what was happening or if that was what the President wanted to happen in the future. The President responded that it wasn't actually happening yet, but that it would be.

The President then listened while the Analyst described the rules of influence at MSC and the organization characteristics. (The notes used by the Analyst are in Appendix N.) The President agreed that the Analyst had described MSC. He wondered, however, if the Analyst's description of the organization wasn't so generic that it would fit almost any organization. The Analyst replied that she didn't think so. The President and the Analyst then discussed some of the changes to improve training in the future. The President foresaw a culture survey and a training department that did not report to the VPHR. He said that he needed help in restructuring the training department to focus it on the bottom line. The Analyst recommended the name of a consultant to help in the process.

Before she left his office, the President suggested that if the Analyst was doing this work again, it would be better for him to be "in the loop earlier." He also said that it would have been nice to have had the report sooner so that he could have read it sooner.

Appendix G

Completed PAT Worksheets

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1. Organization Analysis

Determine where in the organization or work group the training emphasis should be placed.

Step 1. Identify perceived opportunities.

This step occurs during the initial interviews between the analyst and the client. It is part of the discovery or sales process between the analyst and the client. Note that the information gathered in this step can be misleading because people at different places in the organization can have different perceptions of the opportunities/needs.

- Identify the perceived opportunities and the individual(s) who view them as important.

Perceived Opportunities	Perceived by
To identify management training skills that need to be provided.	President, VPHR, MTD.

- What is the product of the organization or work group? Five service products of the organization.
- Who is the client? MTD, VPHR, and President.
- Analyze the information that has been gathered up to this point. Not Done.
- Which of the perceived opportunities are related to the organization's bottom line? training managers will increase productivity.
- Analyze the information that has been gathered up to this point. NOT DONE.
- How are the perceived opportunities related to the bottom line? Better managers lead to more productive departments with more productive employees and less turnover.
- Do the perceived opportunities seem to have a knowledge, skill, or attitude component that can be addressed with training? [✓ yes] no

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 2. Determine the purpose and parameters of the analysis.

- Step 2a. Use the following chart to identify the salient characteristics of the decision maker, the analyst, and the organization and to record summary notes.

yes	no	characteristics summary notes
✓		**Organization** Organization culture: climate for training; support for the training function; history of training in the organization; location of the training function in the organization; organization goals; organization philosophy; emphasis and objectives; values promoted by the organization; amount of consensus/conflict within the organization; legal, social, economic, and political factors inside and outside the organization • Training department growth to a three-person operation, located in HR Department, with access to decision makers. • Company operates in marketplace with changing regulations and technology. The company has recently acquired a company and gone through a reorganization.
✓		Reward structure Merit awards theoretically for performance, incentive structure, nonmonetary rewards like move upstairs, office with a window.
✓		Political factors surrounding the situation • Reorganization and acquisition of a company. • No perceived conflict.
✓		The organization's internal and external environment • Internal: Frustration with lack of movement, lack of leadership • External: Federal regulations.
	✓	Broader program of which training is an element
	✓	Supporting systems such as the selection, human factors, engineering, and work procedures
✓		Terminology and language used in the organization • Financial "processing" company.
	✓	Other

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1
(Step 2a continued)

yes	no	characteristics summary notes
✓		**Analyst** Internal/external consultant • External.
✓		Biases, attitudes, beliefs and values . Believes in collecting performance data for training, using training to address knowledge, skill, and attitude issues of organizati performance, and considering the economics of training.
✓		Skill level • Good.
✓		Type of power • Charisma, expert • Legitimate because connected to MSC training department.
✓		Style and experience of the analyst • Collaborative. • Considerable experience with needs assessment.
	✓	Other
✓		**Decision makers** Expectations of the decision makers • Bottom line focus. • Manager of Training and Development sells to VP who sells to Presid • Decision makers and "influencers."
✓		Amount of support for training . considerable
✓		Amount of consensus among decision makers • There is a question about this The Manager of Training and Development says there is consensus.
✓		Style and experience of the decision makers • MTD: Consensual, experienced. • VPHR: Less experienced with training and needs assessment. • President: unknown.
✓		Skill level of the decision makers • MTD has medium to good skills
✓		The level of the decision makers' position in the organization • President, Vice President for Human Resources, Manager of Training and Development.
	✓	Other

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1
(Step 2 continued)

- Step 2b. Using the information from Step 1 and Step 2a, determine the purpose and the parameters of the performance analysis for training. Specify the purpose of assessment, the kinds of information to be gathered, the resources available to conduct the analysis, the boundaries of the needs assessment, the type of needs assessment, the format of the report, the recipient(s) of the report, and the criteria that will be used to evaluate the analysis process, the proposed solutions, and the product.

The focus is on the management training needs at corporate.

Information relative to future needs will be gathered using organizational records, observations, and interviews.

Support from the training function includes financial resources, access to people, and secretarial support.

The boundaries of the project are management and middle management training. Also, the MTD does not want the investigator to promise confidentiality unless necessary.

The type of needs assessment is to identify future training needs.

Written and verbal reports that include a summary of the process, the prioritized needs and the recommendations Recommendations include optio

- Do the decision makers and the analyst agree about the purpose and parameters of the analysis? A number of strategies can be used to negotiate this agreement. But do not proceed with the assessment until there is agreement.

yes.

- Is the agreement appropriate based on the organization's salient characteristics? yes no

No.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 3. Gather information about potential training opportunities/needs

- On the checksheet below indicate the actions taken by making a check in the yes or no column. Record summary notes about the results.

yes	no	actions	notes
✓		Begin the process at the most general level and proceed to the most specific.	• Identified where the organization was and where it wanted to be before identifying specific concerns.
✓		Use multiple sources and information gathering methods.	• Observation, interview, and review of written records. • Interviewed officers, managers, and nonmanagers.
✓		Gather both quantitative and qualitative information.	• The financial data was quantitative, the stories were qualitative.
✓		Examine current and future performance expectations.	• Future expectations focused on new products. • Current expectations focused on five products, new products, and sales.
✓		Examine current performance.	• Data not available.
✓		Identify measures of the performance.	• Data not available.
✓		Gather information about possible causes and potential solutions.	• Lack of quantitative data resulted in a focus on qualitative data and stories.
✓		Gather information about potential trainees.	• Some potential trainees are homegrown and use street smarts • Some potential trainees recruited from other organizations, have models
✓		Identify those who support and those who do not support the training opportunities/needs.	• The Vice President of Marketing does not support training. • The Vice Presidents of Finance and Development do support training.
✓		Identify subject matter experts.	• Vice President of Development and Acquisition had experience in planning.
✓		Use the Solution Finder (Swanson & Sisson, 1985) to identify potential training and management solutions.	Nontraining: improve communication, provide reporting systems and clarify plans and priorities.
	✓	Renegotiate the purpose and parameters of the analysis if necessary.	

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 4. Gather anecdotal information.

- Gather and record examples of anecdotes, stories, vocabulary, and examples of positive or negative experiences that can be used in the instruction or that can be used to describe the training need. Record the sources and the context.

- Planning: The VPDA's description of the acquisition and subsequent loss of revenue and sale because of lack of planning.

- Planning: the installation of new machines; the Manager of Operations ran into the meeting.

- Project Management: the management of new product introduction was described as a problem by the Sales Trainer, the VPDA, the VPS, the SrVP. Also a major customer was lost before the product was introduced.

- Project Management: The VPDA did not know about seven new products that the Sales Trainer is designing training to introduce.

Customer Service for Financial Professionals; the VPF described customers getting quantities of data that made decision making difficult

Customer Service for Financial Professionals; the analyst observed that the financial documents that she had been given to review did not contain all the desired information and at the same time contained extraneous information.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 5. Analyze Information.

- On the checksheet below indicate the actions taken by making a check in the yes or no column. Record summary notes about the results.

yes	no	actions notes
	✓	Verify data analysis with those who provided the data input if possible. not possible
✓		Determine causes of performance issues. • Lack of Management models • Politics. • Lack of focus on performance.
✓		Identify training and non-training issues. • Used Solution Finder (see Phase 1, Step 3). Possible training solution is to provide management training aimed at specific problems.
✓		Determine solution alternatives. • Top priorities: decision making, project management, planning, customer service for financial professionals.
✓		Determine criteria for selecting solutions. • Most common problems cited by VPs • Most doable project • Problem verified by corroboration.
✓		Prioritize potential opportunities. • Four priorities for training.
✓		Forecast the financial benefits of selected options relative to the organization's bottom line. • VPF forecast performance value gains for all programs. • Training Department gathering cost data.
	✓	Renegotiate the purpose and parameters of the analysis if necessary.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 6. Report the findings to decision makers.

- On the checksheet below indicate the actions taken by making a check in the yes or no column. Record summary notes about the results.

yes	no	actions notes
✓		Explain why the performance analysis for training was done. • Identify management training needs.
✓		Describe how the information was gathered. • Interviews, observations, written document review.
✓		Identify the stated need. • To identify the knowledge, skills, and attitudes needed by managers at Corporate.
✓		Include the findings of the performance analysis for training. • see report.
✓		Identify training and nontraining solutions. • Both management and training solutions were identified.
✓		Identify the most appropriate training solutions. • Customer service for financial professionals.
✓		Specify the forecast costs and benefits of the solutions. • Performance values annually: decision making, $531,200; planning, $26,152, Project management, $228,750; customer service for financial professionals $40,372.
✓		Specify the significance of the findings so that the client's so what question is answered. • Customer service for financial professionals is the most doable project.
✓		Do action planning with the client. • Planned with Manager of Training and Development, Vice President of Finance
	✓	Other.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 1

Step 7. Decision makers acknowledge, prioritize, and determine the training opportunities/needs.

- The decision makers identify the specific performance opportunities/needs for which training resources should be allocated.

- The VPHR tried to stop the needs assessment process.
- The VPF determined that there was a customer service need.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 2. Work Behavior Analysis

Identify and document the specific behaviors needed to accomplish the work.

Step 1. Identify the work to be analyzed.

- Based on the decisions made in Step 7 of Phase 1, specify the work that will be analyzed.

Customer Service Training for Financial Professionals

Step 2. Construct a work behavior analysis plan.

- Use the work factors and analysis methods table to determine the combination of work behavior analysis methods that will be used.

Analysis Methods / Work Factors	General Work Analysis	Specific Work Behavior Analysis		
	Job Description and Task Inventory	Procedure Analysis	Process and Troubleshooting Analysis	* Subject Matter Analysis
work behaviors	• prerequisites	• observable	• partially observable	• non-observable
work interactions	• variety	• worker/materials • worker/machine	• worker/process	• worker/worker • worker/idea
work structure	• degree	• bound to a particular work procedure	• bound to a particular process	• many performance situations
worker autonomy	• worker-supervisor relationships	• follows procedures	• works within established systems	• works within vague or fluid systems
training objectives	• not obtainable from this level of analysis	• ability to follow correct procedures, leading to standard performance	• ability to use efficient methods, leading to standard performance	• ability to use structured knowledge, information, leading to standard performance or results
in-process products	• existing job description • interview notes	• task details • sketches	• system flow chart • equipment parts and purposes list • process analysis chart	• behavioral data collection instruments • collected data • research cards from literature search • synthesis model(s)
end product of the analysis	• 50-150 word narrative overview • list of discrete job tasks	• diagram of machine or material • step-by-step procedure	• troubleshooting analysis	• subject-matter description (may include synthesis model) • reference list

Work factors and analysis methods.

Note: From *Performance at Work: A Systematic Program for Analyzing Work Behavior* (p. 235) by R. A. Swanson and D. Gradous, 1986, New York: Wiley.

* = selected Specific Work Behavior Analysis Method

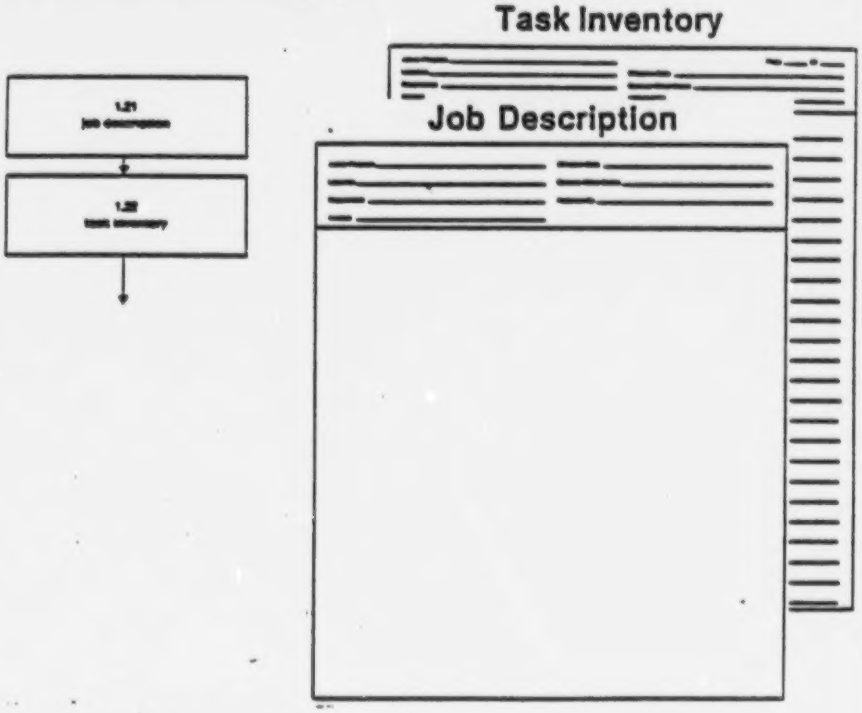
PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 2

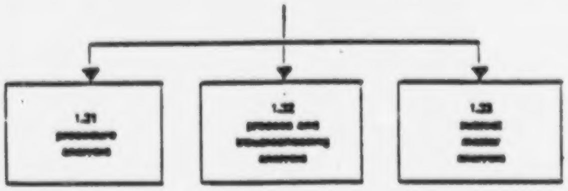
Step 3. Conduct the work behavior analysis.

- Select the appropriate Training Technology System forms and complete the general and specific work behavior analyses as specified in *Performance at Work: A Systematic Program for Analyzing Work Behavior* (Swanson & Gradous, 1986).

1.2 General Work Analysis



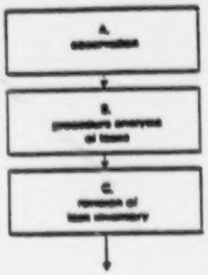
1.3 specific work behavior analysis



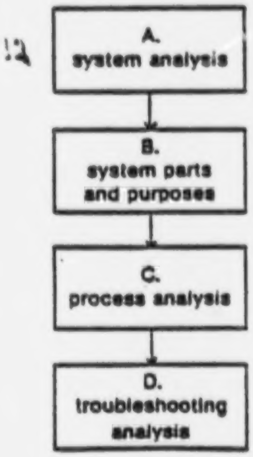
PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

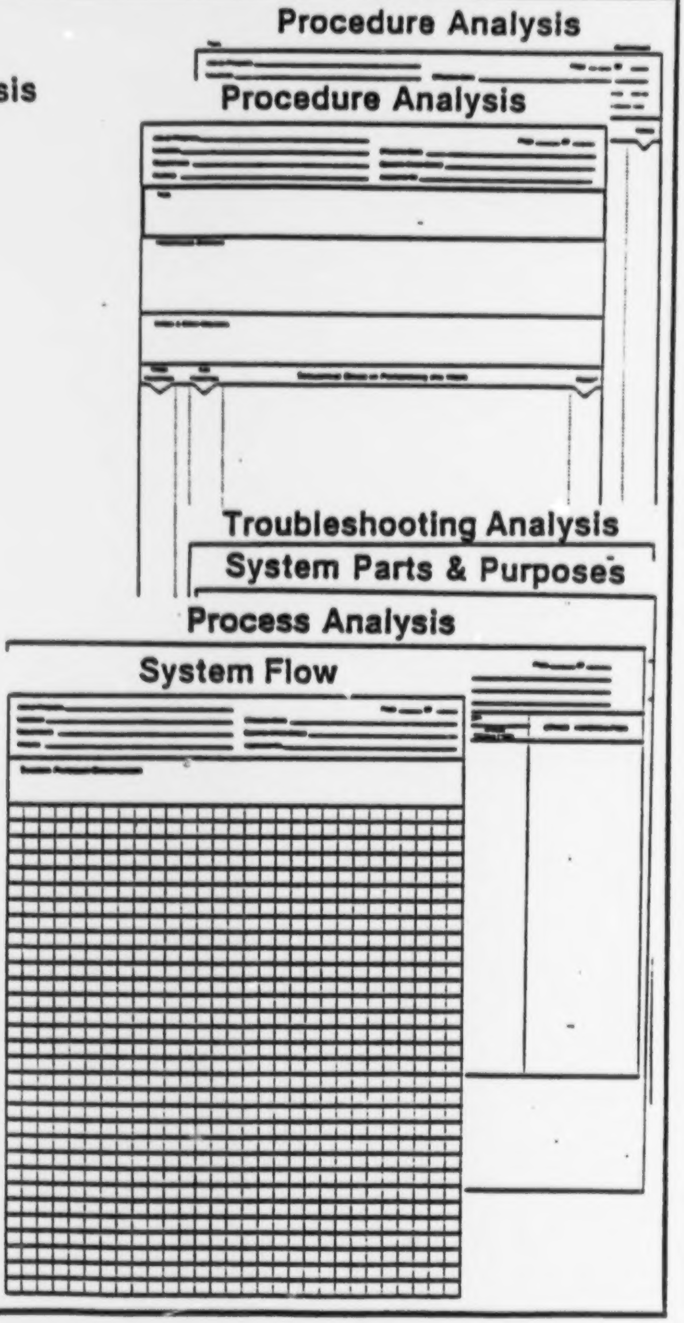
Phase 2
(Step 3 continued)

1.31 Procedure Analysis



1.32 Process and Troubleshooting analysis

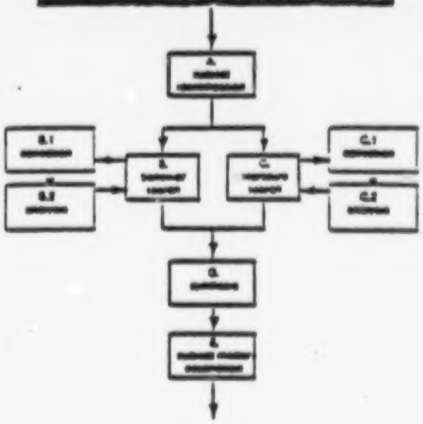

A.
system analysis
B.
system parts
and purposes
C.
process analysis
D.
troubleshooting
analysis

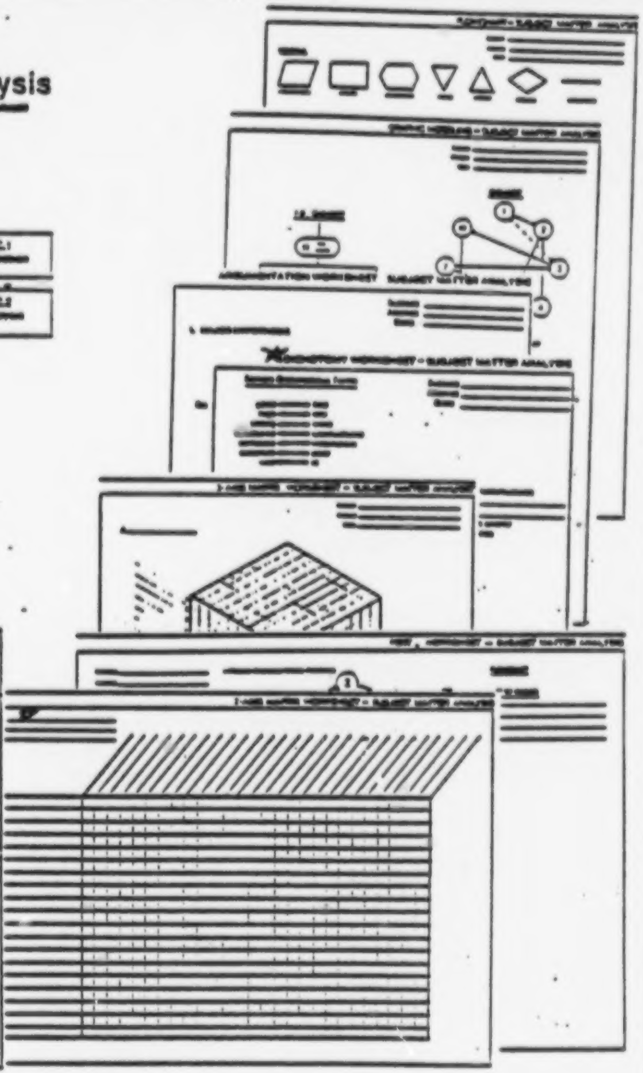

Procedure Analysis
Procedure Analysis
Troubleshooting Analysis
System Parts & Purposes
Process Analysis
System Flow

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 2
(Step 3 continued)

1.33 Subject Matter Analysis





Subject Matter Description

Step 4. Gather anecdotal information.

- Gather and record anecdotes, stories, examples of positive and negative experiences, and vocabulary that can be used in the instruction. Record the sources and the context.

• These are recorded in the interview notes in Appendix K.

* = Slected synthesis tools

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 3. Analysis of Individual Capabilities

Determine which employees need training and the kind of training they need.

Step 1. Identify characteristics and capabilities of the group of trainees.

- Identify "real" measures of job performance and record them.

• Real measures of job performance for the individuals are on their performance evaluations.

• The measure for the group of financial professionals was feedback from the VPF and an opportunity to be a player in the organization.

- Identify the target population and their characteristics.

• Managers and Supervisors of the financial area. One characteristic is that they do not understand customer service.

Step 2. Gather anecdotal information.

- Gather and record anecdotes, stories, examples of positive and negative experiences, and vocabulary that can be used in the instruction. Record the sources and the context.

• See Synthesis of individual analysis (Appendix L).

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 3

Step 3. Gather Information About Nontraining Causes of Performance.

- Gather and record information about the nontraining components of performance, including work design, aptitude, and motivational issues.

• Lack of feedback

• Lack of rewards and incentives

Step 4. Synthesize and analyze information.

- Determine the knowledge, skills, and attitudes that persons need to accomplish the work. On the checksheet below indicate the actions taken and record summary notes about the results.

yes	no	actions	notes
✓		Review the information gathered during Phases 1, 2, and 3 of the analysis.	• Compared the information to identify corroborating and conflicting data.
✓		Use the Solution Finder (Swanson & Sisson, 1985) to identify potential training and management solutions.	, Lack of feedback about performance, lack of consequences for performance, lack of knowledge about customer service.

PERFORMANCE ANALYSIS FOR TRAINING (PAT) WORKSHEET

Phase 3

Step 5. Report the findings to the decision makers

- On the checksheet below indicate the actions taken and record summary notes about the results.

yes	no	actions	notes
✓		Explain why the performance analysis for training was done.	• Identify management skills.
✓		Describe how the information was gathered.	• Observation, review of documents, review of literature, survey.
✓		Communicate the anecdotes to the decision makers.	• Verbally: new product anecdote; VPF's observation
✓		Include the findings of the performance analysis for training.	• Summarized all three phases in written report and in verbal report.
✓		Specify the significance of the findings.	• Business need is for financial professionals to contribute to the business
✓		Do action planning with the client.	• Rehiring a consultant
	✓	Other.	

Step 6. Communicate the findings to those who will design the training.

- Communicate the findings of the analysis.

  • Not applicable, designer is not known at this time,

- Communicate meaningful anecdotes.

  • Not applicable; designer is not known at this time.

Appendix H

Initial Proposal

TRAINING and University of Minnesota
DEVELOPMENT 1954 Buford Avenue
RESEARCH St. Paul, MN 55108
CENTER (612)624-7481 or (612)624-9727

DATE: May 19, 1989

TITLE: **Needs Assessment for Management Development Training at Money Systems Company**

PURPOSE: To determine and prioritize the management training needs at Money Systems Company for both corporate and regional managers.

DURATION: May 6, 1989, to August 31, 1989

SUBMITTED TO: Manager of Training and Development
Money Systems Company

SUBMITTED BY: Catherine M. Sleezer, Research Assistant
Training and Development Research Center
University of Minnesota

Richard A. Swanson, Director
Training and Development Research Center
University of Minnesota

PROJECT OVERVIEW:

Money Systems Company wants to retain leadership in its field. The training department's mission is to support management in communicating and training employees in the knowledge and skills that will enable them to successfully perform their jobs.

The focus of this project is on management training, specifically, the knowledge, skills, and attitudes that managers need in order to be successful at Money Systems Company. Information will be gathered within the organization to answer questions about the competencies that managers need in order to meet the organization's goals. Information will also be gathered at the job level to determine the training needed to perform the jobs. Finally, information will be gathered at the individual level to identify the training that managers need to better perform their jobs.

PHASES AND OUTCOMES:

Phase 1—Organization Analysis: Identify the strategic goals of Money Systems Company and the plans for reaching the goals. Determine how organization effectiveness and managerial effectiveness are measured at Money Systems Company. Determine the managerial competencies that are needed by the organization.

Phase 2—Job Analysis: Identify the skills needed to perform the managerial jobs at Money Systems Company. Jobs will be grouped into functional groups for this analysis.

Phase 3—Individual Analysis: Identify the needs that managers have in terms of maximizing their abilities and opportunities. This phase of the needs assessment will focus on the competencies that individual managers currently possess and those that they wish to achieve.

Phase 4—Articulation: Articulate and report management development needs at the three levels: organization, job, and individual. The results of the needs assessment will be reported to the Manager of Training and Development. At his discretion, an additional report can be made to decision makers at Money Systems Company.

TIMELINE:

The phases are listed in order, but they will not be completed one before the other. The emphasis will shift over the duration of the project. The organization level of analysis will be completed by July 1, and the entire project will be completed by August 30.

STAFFING:

Catherine M. Sleezer is the main consultant on the project. The Director of the Training and Development Research Center will serve as a resource and will provide assistance if needed. Activities on this project will be coordinated with the training projects being done by other University of Minnesota interns. All of the data collection activities will be done on site, but most of the analysis work and writing will be done at the Training and Development Research Center. Money Systems Company will provide typing, photocopy services, and access to a desk and telephone.

COMMUNICATION:

The project consultant will verbally consult with the Manager of Training and Development and the members of the training staff on an "as needed" basis.

Appendix I

In-Process Report

In-Process Report
Phase 1 Money Systems Company
Training Needs Assessment
Executive Summary

This report describes the progress that has been made to date on identifying the training needs for midlevel mangers. The report includes a project overview; a list of the steps that have been completed in conducting the needs assessment; a synthesis of the information that has been gathered about the goals at MSC; a list of the knowledge, skills, and abilities needed by midlevel managers; a review of the nontraining issues that could affect training solutions; and recommendations.

PROJECT OVERVIEW

Needs assessment is a process of identifying the knowledge, skills, and attitudes needed by the organization, and determining which ones will have the greatest impact on the organization's success. It also includes gathering information that will be used in providing training. The needs assessment at Money Systems Company (MSC) focuses on middle management training. Phase 1 of the project is organization analysis. In this phase, the goals of MSC are identified as well as the plans for reaching the goals, and the managerial competencies that will be needed to achieve the goals. Phase 2 consists of job analysis, and Phase 3 is analysis of individual capabilities. Phase 4 is the articulation and reporting of the findings to management.

NEEDS ASSESSMENT STEPS THAT HAVE BEEN COMPLETED

The following steps were taken to implement Phase 1 of the needs assessment process: meeting with the training department staff, planning the needs assessment, reviewing the plan with decision makers, reviewing written documents, and interviewing selected decision makers.

GOALS FOR MSC

The decision makers who were interviewed identified the following goals for MSC: developing new products, improving the process by which new products are developed, increasing product sales, managing a more complex organization, and decreasing the amount of reaction time required to meet business needs.

PERCEPTIONS OF PROFESSIONAL DEVELOPMENT NEEDS FOR MIDLEVEL MANAGERS

Those who were interviewed identified the gaps in performance for the mid-level managers, and the knowledge, skills, and attitudes that will be needed to address those gaps. They also provided examples of how the lack of certain knowledge, skills, and attitudes are negatively affecting the bottom line. The knowledge, skills, and attitudes that were identified are grouped into three categories: managing people, managing work, and managing at MSC. The needs that were most frequently mentioned were project management, decision making, and planning. Influence management, writing skills, roles and responsibilities, basic business concepts and how they apply at MSC, and basics of the marketing, operations, accounting, and IS (information systems) processes used at MSC were also mentioned often. An additional category of knowledge, skills, and attitudes includes those needed by sales managers and directors.

NONTRAINING ISSUES

The persons who were interviewed identified a number of non-training issues. The nontraining issues that could impact the effectiveness of future management development training efforts include inefficiency in the company's decision-making process, the complexity of the issues surrounding sales performance, an organization culture that does not reinforce the use of project management skills, a lack of understanding about jobs, roles, and responsibilities, and the lack of team work among sales, marketing, and training.

RECOMMENDATION

As a first priority, MSC should provide planning, decision making, and project management training opportunities for executives and midlevel managers.

To identify the specific content that should be provided in training, the management jobs that require these skills should be identified and analyzed. The specific skills and competencies needed by individual managers at MSC should also be identified. This will provide information for adapting or designing training programs to provide the specific knowledge and skills that are critical to the organization.

As a second priority, the training department should provide management training to address the other training needs identified in this assessment.

PROPOSED TIME LINE

Conducting job and individual analysis in the specific training content in planning, decision making, and project management will require approximately 72 hours of analysis at a cost of $12.50 per hour for a total of $900.

In-Process Report
Phase 1 Money Systems Company
Training Needs Assessment

This report describes the progress that has been made to date on identifying the training needs for midlevel mangers. The report includes a project overview; a list of the steps that have been completed in conducting the needs assessment; a synthesis of the information that has been gathered about the goals at MSC; a list of the knowledge, skills, and abilities needed by midlevel managers; a review of the nontraining issues that could affect training solutions; and recommendations.

PROJECT OVERVIEW

Needs assessment is a process of identifying the knowledge, skills, and attitudes that are needed by the organization, and determining which ones will have the greatest impact on the organization's success. It also includes gathering information that will be used in providing training. The needs assessment at Money Systems Company (MSC) focuses on middle management training. The needs assessment consists of four phases:

Phase 1—Organization Analysis: Identify the strategic goals of Money Systems Company and the plans for reaching the goals. Determine how organization effectiveness and managerial effectiveness are measured at Money Systems Company. Determine the managerial competencies that are needed by the organization.

Phase 2—Job Analysis: Identify the skills needed to perform the managerial jobs at Money Systems Company. Jobs will be grouped into functional groups for this analysis.

Phase 3—Individual Analysis: Identify the needs that managers have in terms of maximizing their abilities and opportunities. This phase of the needs assessment will focus on the competencies that individual managers currently possess and those that they wish to achieve.

Phase 4—Articulation: Articulate and report management development needs.

NEEDS ASSESSMENT STEPS THAT HAVE BEEN COMPLETED

The following steps were taken to implement Phase 1 of the needs assessment process: meeting with the training department staff, planning the needs assessment, reviewing the plan with the Manager of Training and Development and the Vice President of Human Resources, and reviewing written documents. In addition, interviews were conducted with the Vice President of Sales, the Vice President of Development and Acquisitions, the Vice President of Marketing, the Operations Manager, the Senior Vice President, the Vice President of Information Services, the Vice President of Human Resources, the Training and Development Specialist, the Sales Trainer, and the Manager of Training and Development.

GOALS FOR MSC

The interviews with decision makers revealed that the company is currently facing an extremely competitive marketplace. In addition, Money Systems Company is in a period of transition. Recent changes in the company include: a reorganization that resulted in several retirements and new reporting relationships among upper management; the acquisition of another business; and the sale of parts of the business.

The departure of several senior managers has provided current management with an opportunity to introduce changes in the way work is done at Money Systems Company. Some decision makers described the reorganization as a change in the philosophy for the company. Although the new philosophy has not been clearly articulated throughout the company, changes are being made in how work is done. The sales area is planning several changes. Some operations are being centralized, new products are being developed and introduced, and a new computer operating system is under development.

The company has a five-year strategic plan, but, according to the decision makers who were interviewed, this plan is not appropriate for the organization at this time. The decision makers identified the current goals of the company as developing new products, improving the process by which new products are developed, increasing product sales, managing a more complex organization, and decreasing reaction times to meet business needs.

Perceptions of professional development needs for mid-level managers

The persons who were interviewed gave their perceptions of the gaps between the current performance and the goals for mid-level managers, and the knowledge, skills, and attitudes that are needed to address those gaps. They also provided examples of how lack of knowledge, skills, and attitudes were negatively affecting the bottom line. The knowledge, skills, and attitudes that were identified as needed by mid-level managers can be grouped into three categories: managing people, managing work, and managing at Money Systems Company. An additional category includes the knowledge, skills, and attitudes needed by sales managers and directors. The knowledge, skills, and attitudes most frequently mentioned focused on planning, decision making, and project management. The stars on the following list indicate knowledges, skills and attitudes that were also frequently identified.

Managing People

- Four styles of management
- Delegation and documenting to achieve goals
- Roles and responsibilities*
- Dealing with problem employees
- Managing people in accordance with Equal Employment Opportunity guidelines
- Influence management (e.g., team building, communicating effectively, negotiating, and persuading others).*

Managing Work

- Project management*
- Establishing objectives and developing plans to meet them
- Problem analysis and problem solving
- Setting up a work flow
- Unit analysis
- Writing skills*
- Presentation skills
- Conducting meetings
- Planning (strategic, tactical, and operational)*
- Documenting the work process
- Decision making*

Managing At Money Systems Company

- Basics of the marketing, operations, accounting, and information systems processes used at Money Systems Company*
- Understanding the needs and objectives of others in the organization
- Basic business concepts and how they are apply at Money Systems Company (i.e., budgeting, planning, return on assets and their effects on the bottom line at Money Systems Company; relationship to external environment, including Prine, Inc., the federal government, and the economy).*
- Managing culture change

Knowledge and skills needed by sales managers and directors

- Product knowledge
- Training on how to install new machines
- Selling skills reinforcement (e.g., negotiating, closing, and presenting)
- The process of training others to sell
- The process of monitoring the marketplace (e.g., getting and giving feedback, and curbstone coaching)

Non-training Issues

The persons interviewed also identified a number of non-training issues. The non-training issues that could affect the effectiveness of future professional development training for managers included:

- In this organization, decisions are made by the senior managers and carried out by managers lower in the hierarchy. As the organization has become more complex, senior managers face issues of putting out fires and lack of time. Midlevel managers lack the skills, information, and power to make many decisions. Providing midlevel managers with the knowledge and skills to make decisions will not affect the organization's bottom line unless these managers are also given guidelines about what decisions to make, information pertinent to the decisions, power to make the decisions, accountability for results, and rewards for action.

- Marketing, sales, and sales training are not working as a team. This lack of teamwork is apparent in the new-product training that is being designed. Marketing has not provided key information on the new products. New-product training that does not provide marketing information to the sales force will have less impact on the bottom line than it potentially could have.

- Increasing sales is a key need of the company. Perceived non-training factors that could influence sales performance include:
    - sales managers and directors are not clear about their future role in the company
    - the lack of consistency in the way that sales people install products results in repeat visits to the agent which means additional paperwork, travel, and expense
    - the amount of paper work and red tape involved (e.g., 20 pieces of paper for one installation)
    - the incentive system
    - the motivation of retail managers to sell

- A knowledge and skill often mentioned as needed by mid-level managers was project management skills. However, one manager who was hired from another organization and who has these skills does not use them at Money Systems Company because use of the skills is not supported by the culture.

RECOMMENDATION

As a first priority, MSC should provide planning, decision making, and project management training opportunities for executives and midlevel managers.

To identify the specific content that should be provided in training, the management jobs that require these skills should be identified and analyzed. The specific skills and competencies needed by individual managers at MSC should also be identified. This will provide information for adapting or designing training programs to provide the specific knowledge and skills that are critical to the organization.

As a second priority, the training department should provide management training to address the other training needs identified in this assessment.

PROPOSED TIME LINE

Conducting job and individual analysis in the specific training content in planning, decision making, and project management will require approximately 72 hours of analysis at a cost of $12.50 per hour for a total of $900.

Appendix J

Final Phase 1 Report

TRAINING and University of Minnesota
DEVELOPMENT 1954 Buford Avenue
RESEARCH St. Paul, MN 55108
CENTER (612) 624-7481 or (612) 624-9727

December 26, 1989

Final Report: **Phase 1 Money Systems Company Training Needs Assessment**

Submitted To: **Manager of Training and Development**

Submitted By: **Catherine M. Sleezer**

This report describes the progress that has been made to date on identifying the training needs for midlevel managers. The report includes a project overview; a list of the steps that have been completed in conducting the needs assessment; a synthesis of the information that has been gathered about the goals at Money Systems Company; a list of the knowledge, skills, and attitudes needed by midlevel managers; a review of the nontraining issues that could affect training solutions; and recommendations

Project Overview

The purpose of the training needs assessment project is to determine and prioritize the training needs for corporate and regional midlevel managers at Money Systems Company. The training department will use this information as the basis for planning training programs. The needs assessment consists of the following four phases.

Phase 1—Organization Analysis: Identify the goals of Money Systems Company and the plans for reaching the goals. Determine how organization effectiveness and managerial effectiveness are measured at Money Systems Company. Determine the managerial competencies that are needed by the organization.

Phase 2—Job Analysis: Identify the skills needed to perform the managerial jobs at Money Systems Company. Jobs will be grouped into functional categories for this analysis.

Phase 3—Individual Analysis: Identify the needs of managers for maximizing their abilities and opportunities. The focus here is on competencies that individual managers currently possess and those that they wish to achieve.

Phase 4—Articulation: Articulate and report management development needs at the organization, job, and individual levels.

Needs Assessment Steps That Have Been Completed

Accomplishing Phase 1 of the training needs assessment included the following activities: meeting with the training department staff, planning the needs assessment, and reviewing the plan with the Vice President of Human Resources and the Manager of Training and Development, reviewing written documents, interviewing selected decision makers, analyzing information, and determining the costs and benefits of recommended programs. The written documents that were reviewed included the strategic plans for the organization and the training department, financial statements, and current training programs. The following individuals were interviewed: the Vice President of Sales, the Vice President of Development and Acquisitions, the Vice President of Marketing, the Manager of Operations, the Senior Vice President, the Vice President of Finance, the Vice President of Information Services, the Vice President of Human Resources, a Regional Manager, the Training and Development Specialist, the Sales Trainer, and the Manager of Training and Development.

Results of Phase 1: Organization Analysis

Goals for Money Systems Company

The interviews with decision makers revealed that the company is currently facing an extremely competitive marketplace. In addition, Money Systems Company is in a period of transition. Recent changes in the company include a reorganization that resulted in several retirements and new reporting relationships among upper management, the acquisition of another business, and the sale of parts of the business.

The departure of several senior managers has provided current management with an opportunity to introduce changes in the way work is done at Money Systems Company. Some decision makers described the reorganization as a change in the philosophy for the company. Although the new philosophy has not been clearly articulated throughout the company, changes are being made in how work is done. The sales area is planning several changes. Some operations are being centralized, new products are being developed and introduced, and a new computer operating system is under development.

The company has a 5-year strategic plan, but according to the decision makers who were interviewed, this plan is not appropriate for the organization at this time. The decision makers identified the current goals of the company as developing new products, improving the process by which new products are developed, increasing product sales, managing a more complex organization, and decreasing reaction times to meet business needs.

Perceptions of Professional Development Needs for Midlevel Managers

The persons who were interviewed gave their perceptions of the gaps between the current performance and the goals for midlevel managers, and the knowledge, skills, and attitudes that are needed to address those gaps. They also provided examples of how lack of knowledge, skills, and attitudes were negatively affecting the bottom line. The knowledge, skills, and attitudes that were identified as needed by midlevel managers can be grouped into three categories: managing people, managing work, and managing at Money Systems Company. An additional category includes the knowledge, skills, and attitudes needed by sales managers and directors. The categories are listed below. The knowledge, skills, and attitudes most frequently mentioned focused on planning, decision making, and project management. The stars on the following list indicate knowledge, skills and attitudes that were also frequently identified.

Managing People

- Four styles of management.
- Delegation and documenting to achieve goals.

- Roles and responsibilities.*
- Dealing with problem employees.
- Managing people in accordance with EEO guidelines.
- Influence management (e.g., team building, communicating effectively, negotiating, and persuading others).*

Managing Work

- Project management.
- Establishing objectives and developing plans to meet them.
- Problem analysis and problem solving.
- Setting up a work flow.
- Unit analysis.
- Writing skills.*
- Presentation skills.
- Conducting meetings.
- Planning.
- Documenting the work process.
- Decision making.
- Customer service for accountants.

Managing At Money Systems Company

- Basics of the marketing, operations, accounting, and information systems processes used at Money Systems Company.
- Understanding the needs and objectives of others in the organization.
- Basic business concepts and how they are apply at Money Systems Company (i.e., budgeting, planning, return on assets and their effects on the bottom line at Money Systems Company; relationship to external environment, including Prine, Inc., the federal government, and the economy).*
- Managing culture change.

Knowledge and Skills Needed by Sales Managers and Directors

- Product knowledge.
- Training on how to install new machines.

- Selling skills reinforcement (e.g., negotiating, closing, and presenting).
- The process of training others to sell.
- The process of monitoring the marketplace (e.g., getting and giving feedback, and curbstone coaching).

Nontraining Issues

The persons interviewed also identified a number of nontraining issues. The nontraining issues that could affect the effectiveness of future professional development training for managers were as follows::

- In this organization, decisions are made by the senior managers and carried out by managers lower in the hierarchy. As the organization has become more complex, senior managers face issues of "putting out fires" and lack of time. Midlevel managers lack the skills, information, and power to make many decisions. Providing them with the knowledge and skills to make decisions will not affect the organization's bottom line unless they are also given guidelines about what decisions to make, information pertinent to the decisions, power to make the decisions, accountability for results, and rewards for action.

- Marketing, sales, and sales training are not working as a team. This lack of teamwork is apparent in the new-product training that is being designed. Marketing has not provided key information on the new products. New-product training that does not provide marketing information to the sales force will have less impact on the bottom line than it potentially could have.

- Increasing sales is a key need of the company. Following are the perceived nontraining factors that could influence sales performance:
  - Sales managers and directors are not clear about their future role in the company.
  - The lack of consistency in the way that sales people install products results in repeat visits to the agent, which means additional paperwork, travel, and expense.

  - The amount of paperwork and red tape involved (e.g., 20 pieces of paper for one installation).
  - The incentive system.
  - The motivation of retail managers to sell

- A knowledge and skill often mentioned as needed by midlevel managers was project management skills. However, one manager who was hired from another organization and who has these skills does not use them at Money Systems Company because use of the skills is not supported by the culture.

RECOMMENDATION

Provide planning, decision-making, and project management training for executives and midlevel managers. Provide customer service training for managers and clerks in the accounting department.

As a first priority, the training department should address the knowledge, skills, and attitudes that were most often identified as needed by managers at Money Systems Company: planning, project management, anddecision making. The training department should also provide customer service training for the managers and clerks in the accounting department to prepare department personnel to communicate effectively with other departments so that they can provide appropriate documents. The goal would be for accounting managers and clerks to provide needed information, without providing unnecessary information.

To identify the specific content that should be included in training, the management jobs that require these skills should be identified and analyzed. The specific skills and competencies needed by individual managers at Money Systems Company should also be identified. This will provide information for adapting or designing training programs to provide the specific knowledge, skills, and attitudes that are critical to the organization.

As a second priority, the training department should provide management training to address all other training needs identified in this assessment.

The recommended programs were analyzed to determine their costs and benefits. Each recommended program was compared to the value that the company would gain if there were no training program on that topic. The performance value of a program is based on its expected contribution to the organization's goals. The Vice President of Finance estimated the value of the performance that could result from implementing the program and the value for not implementing the program. For each estimation, the performance value was calculated using the most conservative estimates.

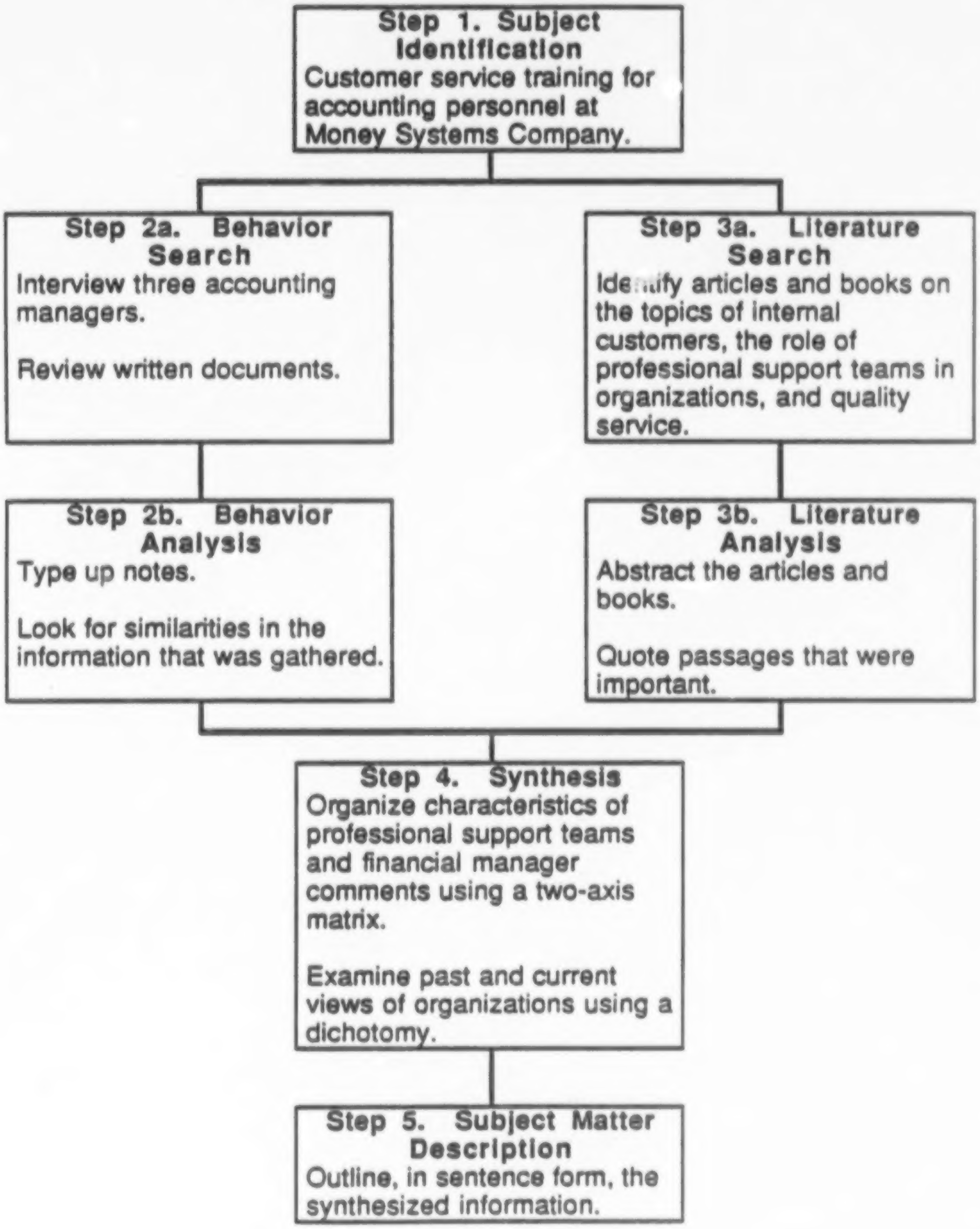
The value of implementing each of the recommended programs was compared to the value of not implementing the training program. Using the most conservative estimates, the predicted annual performance values for implementing each of the four programs were as follows: (a) decision making, $531,200; (b) planning, $26,152; (c) project management, $228,750; and (d) customer service training for financial professionals, $10,372.

The predicted performance value for not implementing the programs was zero or a negative value. To determine the financial benefit to the company, the costs of the training program must be subtracted from the performance value. The training department is currently gathering the cost information.

Appendix K

Subject Matter Analysis

SUBJECT MATTER ANALYSIS PLAN



Step 1. Subject Identification
Customer service training for accounting personnel at Money Systems Company.

Step 2a. Behavior Search
Interview three accounting managers.

Review written documents.

Step 2b. Behavior Analysis
Type up notes.

Look for similarities in the information that was gathered.

Step 3a. Literature Search
Identify articles and books on the topics of internal customers, the role of professional support teams in organizations, and quality service.

Step 3b. Literature Analysis
Abstract the articles and books.

Quote passages that were important.

Step 4. Synthesis
Organize characteristics of professional support teams and financial manager comments using a two-axis matrix.

Examine past and current views of organizations using a dichotomy.

Step 5. Subject Matter Description
Outline, in sentence form, the synthesized information.

LITERATURE ANALYSIS

Summary: Professional support teams (1990) by Davis-Sacks, M. L., Denison, D. R., and Eisenstat, R. A. In J. R. Hackman (Ed.). *Groups that work (and those that don't)* (pp. 195-201). San Francisco: Jossey-Bass.

The basis of the book, *Groups That Work (and Those That Don't)* is an analysis of 27 task-performing groups to reveal why some work groups succeed and some fail. Seven types of work groups were identified, including top management, task forces, professional support teams, performing groups, human services teams, customer service teams, and production teams. The chapter titled "Summary: Professional Support Teams" describes the characteristics of the professional support teams that were analyzed in this study.

The professional support teams comprised members who had specialized knowledge and skills that were not widely shared by others in the organization. Each professional support team operated as a pool of experts that was waiting for a need to arise to which it could apply its knowledge and skill. The team's expertise was critical in helping the team respond to special organization needs. In addition to having expertise in a specialized area, the team also had knowledge about the organization.

The authors identified a generic work cycle for professional support teams. The cycle has four stages: scanning, diagnosing, proposing, and handing off. In the scanning stage, "the professional support team lies in wait, antennae extended, for a problem to emerge. . . . The team may be either actively scanning the organization or passively waiting for the phone to ring" (pp. 196-197). Team members looked for opportunities in the organization to use their skills. Team members liked to use their expertise to bring an interesting problem under control, but they had little to do until others explicitly asked for their services or until some organizational event triggered the need.

In the diagnosing stage, the support team had to reformulate the problem into the language used by the team. Team members often worked with a set of symptoms from which the members developed an understanding of the underlying problem.

In the proposing stage, the team produced a concrete proposal that the client could implement. The solution proposed by the team had to meet two criteria. It had to be acceptable to the professional support team because it was right and it had to be acceptable to the client because it looked as if it would work. The team had to translate the proposal back into a language and format that the client could understand before the proposal was presented to the client for approval.

In the handing off stage, someone else made the final decision about the team's recommendations and then executed the ideas. Because the team's work resulted in a product that was handed off to someone else, the team members might not see the results of their work or know why their work was rejected or modified. If everything had gone well, the team's existence might not even be highlighted.

The authors noted that the length of time that the work cycle lasted varied and that teams had multiple cycles going simultaneously.

Members of professional support teams had strong views about how their expertise should be used. The expertise of the professional team tended to create cultural conflict between team members and others in the organization. The authors noted that when the professionals tried to explain their perspectives, they often seemed to others in the organization to be speaking a foreign language.

The professional groups that were studied had to struggle constantly with the disparity between the amount of their expertise and their limited authority. The line functions had the authority, and the professional groups had to accommodate their needs and wishes.

Generally, all the groups that were reviewed had complex relationships with groups both within the organization and outside it. The relationships required ongoing management of intergroup relations. The authors pointed out that intergroup skills are a professional skill and that professional teams are typically not trained in intergroup skills and may see such activities as outside their real work.

The teams that were reviewed were trying to balance their identities as skilled professionals and their identities as organization members. Professional team members would often rather become engaged in professional development than become involved in the organization.

In the summary to the book, Hackman noted the risks and opportunities for each type of work group. A characteristic risk that professional support groups face is that they wait for others, typically line managers, to call for their services. This puts the team in the reactive stance, which can erode morale and diminish a team's capability to respond vigorously and professionally when its services are called for. The opportunity for professional teams is for team members to use and hone their expertise. Team members usually value opportunities to exercise their special expertise.

Achieving quality in financial service organizations: How to identify and satisfy customer expectations (1988) by Grasing, R. E., & Hessick, M. H. New York: Quorum.

The book described some of the changes that financial services companies must address. The authors noted that financial services companies used to be easy to run. The industries were stable and there were definite rules to follow. If one stuck to the established rules, it was difficult to fail. Dissension was not tolerated. Advancement was possible only after you paid your dues and the dues required years of dedicated work.

However, at the current time, the industry is facing change. These changes include the automation of financial services and customers who are better educated and have higher expectations.

Interviews with key executives highlighted, among other things, the fact that quality is a visible front on which companies can compete. The executives also emphasized the importance of the customer, and that understanding the concept of the customer takes work. In addition, understanding the customer's expectations takes savvy.

Grasing and Hessick noted that in their experience, companies on the average have been able to reduce expenses by between 25% and 40% with a comprehensive quality process. The actual savings that a company achieved, however, depended on four factors: the condition of the company at the start, the culture of the organization, the levels of analysis that were used, and the involvement of every employee.

The quality process begins by defining the term *quality*. This includes defining what the customer expects. At the corporate level, this should be defined, and it should also be defined for each function in the organization. In addition, all the functional areas should define how they support the corporate definition. The authors noted that the products in the financial services industry are mostly intangible. When the product can be neither seen nor heard, one way to define quality is to look at the underlying value that the products provide.

The customer must also be identified. All departments or functions serve the organization's end customer, but the end customer may not be the function's direct customer. The customer, by definition, is the patron of the function. The customer may be another internal or external company department. In discussing the concept of who the customer is, the authors referred to the classification of people based on who an individual served (first identified by Albrecht and Zemke in *Service America*). The three categories of people that were identified are (a) the primary service people--those who have direct contact with the customer, (b) the secondary service people--those who usually serve the customer unseen, and (c) the service support people--everyone else. The authors highlighted the importance of identifying the customer. According to them, the realization that someone is not the antagonist, but "the reason to be" can cause attitudes to shift overnight and can eliminate negative feelings about other employees.

Some departments, such as accounting, finance, investments, actuarial, mortgage services, and others, have more contact with internal customers than with external customers, and the hope is that the internal customer speaks for the external customer. The internal customers create support services for the employees who have contact with the customer. If the quality is poor for the internal customer, then the support services they provide will also be poor, and this, in turn, usually results in a poor quality of service being provided to the outside customer.

The authors suggested that one technique for improving quality is for the managers to take off their banker hats and put on their customer hats when looking for improvements. The authors discussed using a workshop to do this. The workshop process they outlined focused first on the concept of the essential purpose of the function. The members of the workshop identified the essential purpose of the function to the function's customer or user by identifying what the essential purpose was when the function was organized and whether the essential function is critical in today's environment. Then the workshop orders every component of work currently performed by the function according to why we do things and how we do them. Each component is rated to determine how important it is to the customer and how well, in the customer's evaluation, the current function's employees perform. According to the authors, the function is then "segmented into a group of things that, in the customer's eyes (1) are very important that we do very well, (2) are very important that we don't do well, (3) are not important that we don't do well and (4) are not very important that we do very well" (p. 100). The group participating in the workshop at this point often begins asking questions such as whether they need to do a component at all or if it should be done in other ways.

Corporate values are also important to the employees. When organizational changes take place in companies where value systems are in place, the employees know where they stand with management. Knowing corporate values gives employees a way to evaluate what will be successful within their organization. It gives employees trust and confidence that the new operation is in the best interest of the customer and the employees. Values are the basis for standards of achievement in the organization and they form the heart of the corporate culture. In a company with a strong culture, the employees know the informal rules and spend little time deciding how to act in a given situation.

The techniques that the authors suggested for ensuring success in the improvement efforts and the entire operation were (a) evolve and maintain work management systems that provide employees with information about the quality of work that they are doing, (b) develop an attitude about producing more output with the same or less input or producing the same with less input, (c) make the tough decisions to reduce staff if necessary, (d) focus on improvements that can be implemented quickly, (e) budget for improvement by determining the value that the improvement will have on the organization's bottom line, (f) share the wealth through higher salaries, and (g) pay for performance.

Service management: Strategy and leadership in service businesses (1984) by Normann, R. New York: Wiley.

This book is written for executives in organizations whose products; such as a service, image, or know-how; have high nonmaterial content . The author described some of the characteristics of service organizations. These characteristics included (a) the services are intangible, (b) most services consist of acts and interactions are typically social events, (c) the production and the consumption of the service can not be kept apart because they often occur simultaneously, and (d) the customer is often more than a customer–he or she is also a participant in the production of the service.

The intangible property of services causes them to have certain characteristics. For example, they can not be stocked, nor can they be easily demonstrated. Also, the intangibility of a service forces the customer to look for additional clues in evaluating the service.

Most services are the result of social acts that take place between the customer and the representative of the service company. The authors call this social act the *moment of truth*. In service organizations, there are numerous one-to-one contacts between the contact persons and the clients, so there are numerous moments of truth. The outcome and the process of the social act is influenced by the skill, motivation, and tools employed by the person giving the service and the expectations and behavior of the client. The quality of the service is often evaluated not just on the service that is being offered but also on the quality of the interaction between the person giving the service and the client. The client also looks for clues about the system that produces the service. The behavior and style of the contact personnel and the physical tools and facilities on display provide the client with information about the system that produces the service.

In a service organization, the client is a consumer and is also part of the service delivery system. Part of how the client sees the output of the service company depends on how much and in what way he or she has participated in the provision of the service and in what problems and satisfactions the process involves. The client can participate in the function by specifying the service (e.g., custom tailored services), by co-producing the service (e.g., by collecting the data for a product analysis), by judging quality control, and by maintaining the ethos (e.g., client gives feedback).

Customers who purchase a service differ from the customers who are purchasing a product. Those purchasing a product can evaluate the product itself (e.g., kick the tires of the automobile), but those who are purchasing a service can not experience the service until after it is sold. From the customer's perspective, he or she is involved with evaluating potential benefits and with reducing uncertainty and risk. The service organization must develop tools to make this process effective.

The most important clue about the service organization tends to be the interaction between the contact person and the client. The behavior, ambitions, skills, and style of the contact person will be closely watched. This is particularly true in the case of professional services where the lack of knowledge makes it difficult for the client to evaluate the service. In these situations, two aspects of the behavior of the contact person are of decisive importance. One is the amount of interest and emotional empathy that is shown, the willingness to go to great lengths to serve the client. The second key principle is that of "instant mini-delivery." The skilled contact person will find or create the opportunity to demonstrate what he or she can do for the client. For example, a well-chosen suggestion or proposal can create confidence in the company's capacity and problem-solving ability and promise more value to come. Client uncertainty can be reduced by demonstrating resources and concrete achievement.

Because the moment of truth represents a social event, the dynamics and outcome are determined in great part by the skill, the mood, and the expectations of the contact personnel and the client. One element in quality management involves shaping the expectations of clients and preparing them to enter the interaction in such a way that it contributes to the social dynamic that engenders the quality experience. The service organization must recognize that clients are seldom there for the asking; they have to be acquired or even created.

A problem that is common to many service businesses is that employees at all levels in the hierarchy are in regular contact with customers. The contacts are often of a routine nature, but there is always the possibility of a crisis that will have to be handled not only with technical skill but with a certain degree of personal tact and wisdom. In some service jobs, most interaction can follow a predictable path that calls for little skill or few personal qualities on the part of the employee, but there are also occasions when extraordinary skill is needed.

In a service company, contact people need three things. They need the technical skills related to the business, the interactive skills (e.g., eye contact with the customer), and the values that are crucial to the success of the business. When the service organization is decentralized and is dependent on individual contributions, it can be effectively managed by infusing the organization with values that are directly related to the success of the business.

The values and culture and ethos of the organization are important. With the number of client contacts that are made in the service industry, achieving high quality service relies on making sure that every employee has the appropriate skills and is guided by the appropriate ethos.

The image of the company is important and should be marketed to internal employees. Internal marketing should occur continuously, but is particularly appropriate when the company needs pulling up out of what has been a lethargic state or when new types of services are being launched.

The border between the employee and the client and between employees and other representatives of a service company is complex. Consequently, the attitudes and norms that prevail inside the company and those required at the moment of truth with the customer should be in accord with each other.

One of the most difficult things is to manage the internal service circle. The author points out that it can be relatively easy to convince top management that change is needed, and contact personnel are also easily convinced—especially if they are given new tools that will gain positive feedback for customers. It is often more difficult to create the same involvement in middle management. Without their involvement, the behavior of the service organization is often characterized as ambiguous or inconsistent.

In the best service companies, training programs fill a precise and well-understood purpose related to the total business situation and strategy of the company. Programs can be designed to meet the operational needs of the organization, including the interface between different categories of personnel, different functions, and different organizational levels.

Reinventing the corporation (1985) by Naisbitt, J., & Aburdene, P. New York: Warner Books.

The focus of this book is that two elements necessary for social change are present at the current time. These changes, economic necessity and new values, can lead to changes in the corporation. According to the authors, "we are entering a dynamic period when the economic imperative for a more competitive, more productive work force is leading us back to the kind of humanistic values expressed in the philosophy of Koomorgen Corp., 'trust, freedom, and respect for the individual'" (p. 2).

The authors identified the forces that were causing companies to re-invent the corporation. These forces include the shift in strategic resource from an industrial to an information society, the coming seller's market and the new competition for the best employees, the whittling away of middle mangement, the continuing entreprenerial revolution, the emergence of the new varigated workforce, the demographic revolution of working women, the growing use of intuition and vision, the mismatch between our education system and the needs of the new information society, the rising importance of corporate health issues, and the values of the baby boomers, those born between 1946 and 1964, who are now populating the ranks of management.

The first ingredient in reinventing the corporation is a powerful vision that focuses on where the company is going and how to get there. The company's vision becomes an organizing force for everything that the people in the corporation do.

After the vision is created, people must be recruited who can help realize the vision by adopting it as their own and sharing the responsibility for achieving it. *Alignment* is the term given to this process.

Achieving the vision requires that the vision and alignment is translated into people's day-to-day behavior by grounding the concepts in the company's day to day environment. The stories, rituals, and heroes of the organization show its values.

The authors also address the question of what structures will realize the vision. There is a growing belief that bureaucratic hierarchies will no longer work. Alternative ways to structure an organization include the small team, the cross-disciplinary team, and the biological option.

The authors noted that *Fortune* magazine's eight most innovative companies in America are masters of the cross-disciplinary team. Stratford P. Sherman was quoted as writing in *Fortune* that people in different disciplines are simply not allowed to remain in isolation. Business units are kept small to throw engineers, marketers, and finance experts together into the sort of tight groups found most often in start-up companies. And when people work together in teams now, the idea is to cooperate as individuals, rather than blending into a group where everyone is the same.

The view of the model employee is also shifting from one who carries out orders to the employee who takes responsibility and initiative, and monitors his or her own work. The model employee also uses managers and supervisors in their new roles of facilitators, teachers, and consultants.

The authors also identify 10 guidelines for reinventing the corporation. They are (a) the best and brightest people will gravitate toward those corporations that foster personal growth; (b) the manager's new role is that of coach, teacher, mentor; (c) the best people want ownership—psychic and literal—in a company; and the best companies are providing it, (d) companies will increasingly turn to third-party contractors, shifting from hired labor to contract labor; (e) authoritarian management is yielding to a networking "people style" of management; (f) entrepreneurship within the corporations–intrapreneurship–is creating new products and new markets and revitalizing companies inside out; (g) quality will be paramount; (h) intuition and creativity are challenging the "it's all in the numbers" business school philosophy; (i) large corporations are emulating the positive and productive qualitites of small business, (j) the dawn of the information economy has fostered a massive shift from infrastructure to quality of life.

REVIEW OF WRITTEN DOCUMENTS

The Vice President of Finance provided the researcher with copies of the Position Description Questionnaires (PDQs) for 10 of his people.

Description of the Forms

The questionnaires contained self-reported information about the job. The forms included a managerial/supervisor checklist where the individual checked the items that applied to the job, a graphic representation of an organization hierarchy where the individual could show the reporting relationships of the job and the number of people supervised, the job description, the description of the primary purpose and the duties and responsibilities of the job, and time allocation for duties, the internal and external contacts required for the job, the major decisions, the problem solving, and the use of judgement. The individual also identified the quantitative dimensions of the job, the required knowledge and skills, and licenses/certificates and additional information. The completed forms had then been reviewed and signed by the individual's manager.

Analysis

Each of the jobs that was reviewed involved a number of contacts with people internal to the organization and external to the organization. The internal contacts included officers, the legal department, regional directors/ managers, supervisors, the auditors. External contacts included vendors, the parent company, banking and investment officers, subsidiaries, and the Internal Revenue Service of the federal government.

Many of the managers listed skills such as communication, listening, or human relations, but none of the jobs listed customer service as a required knowledge and skill.

INTERVIEW GUIDE FOR JOB ANALYSIS

Introduction:

The Vice President of Finance suggested that I talk with you about some training that we are looking at in the area of customer service. Purpose of the visit: Confirm need perceived by the Vice President of Finance and discuss some of the specific ways that the person deals with customers.

Structured Questions:

- Who are your customers?
- Type of help that the customers generally need (implicit, explicit, implicit, tangible?).
- How do you know when you have successfully helped a customer?
- Have you ever seen a situation when a customer has been given too much information, the wrong information, too little information and you found out about it later?
- Can you describe the process of customer service before, during, and after the interaction? (Use example of receptionist providing a phone number).
- What key skills are needed to be effective in customer service in this company?

Interview With the Manager of Product Line Accounting (MPLA)

The Analyst explained that the purpose of the interview was to gather information about customer service training. The MPLA explained that he and the two controllers who report to him work with product line managers. The Analyst asked who his customers were. The MPLA replied that the customers were the product line managers for whom they provided accounting support. The MPLA saw his role not just as an accountant but as an information provider who tried not to let extraneous information get in the way. He has been at Money Systems Company for 6 years. The MPLA also noted that accountants have an opportunity to improve both their image and the service that they provide. Accountants are not always held in high esteem in the company. They are blamed for problems and yet are not looked at as financial experts. Accounting is termed *bookkeeping*. So the MPLA feels that he has to educate the customers about the potential that accounting can offer. Six years ago, accounting was a clerical function; now there are more professional people in the accounting area. "Accountants can provide people with too much information, you try to educate people, but people may not be comfortable with it." (Note: This is a validation of the need.)

The Analyst asked about the kind of information that the customers needed or received. The MPLA noted that the customer doesn't know what to ask him for. "We now put ourselves in an empathy role to say, 'Here's what we can provide'. We used to ask what do you need." The MPLA in the last year has become more proactive in generating ideas. He has had some success. The Analyst asked for some examples. The MPLA replied that there have been better ways to present financial statements. The MPLA also described how he worked with managers. In working with managers, he often suggests an idea and gives them something concrete. Some managers know what they want. If his idea won't work, he comes up with an alternative.

The Analyst asked about the process of helping the customer and noted that it sounded as though one of the things that the MPLA did before he helped a customer was to provide a concrete example of what he could do. The MPLA responded yes, that that was one of the things that he did, and he also sits in on meetings so that he can identify business issues and be in on the start-up and know what is going on in the business. In this way, he can be proactive. He noted that customer service is also a process of putting yourself in the place of the manager and thinking, "These are the decisions I would have to make, so what information would I need to make the decisions?" The MPLA said he does not throw out nice-to-have information to the managers, and he promotes the team-oriented effort. He addresses issues and priorities [which is making an implicit contract]. His message is "We'll do any thing we can to get the project done on time! " The MPLA noted that getting things done on time is a rarity for the company, and it has built his credibility.

The MPLA also noted that he works to speak the language of the manager. There are all kinds of product specific words. He said, "You have to follow meetings to understand the words and to be able to offer help." He also noted that there is not always agreement on what should be done. The MPLA also educates managers so they know what to expect and what it will cost. The managers may not see all the work—for example, control— so the accountants have to communicate that they are doing those things also. The accountants have to build the perception of what the managers are getting beyond bookkeeping.

The MPLA's philosophy is that there is a change in roles in the company. There is decentralization, and it is important to get accountants' expertise involved in the business.

The Analyst asked what happens during a customer interaction. The MPLA said he tries never to say never. He may say, "No, I can't give you that now—but I will do research and will get back to you by such and such date." He makes sure that the date meets their expectations. The MPLA also noted that there are a lot of hallway conversations, and he has learned that there can be a problem with off-the-record and on-the-record communication. He has learned that "Let me check" is the response to a hallway conversation. His philosophy is "We want to help; 99% of the time we can"

The MPLA also noted that some of his ability to help goes with understanding the culture of the organization. Helping requires having information on the organization situation. Because he understands the culture, management requests become predictable. He said: "Customer service here is an interpersonal process. We have to know what they mean; so we go to meetings and then we can interpret." The MPLA said: "In one instance what they said they wanted we didn't interpret correctly, so we gave them the wrong stuff. It led to a crisis. They had been asking for information on the project, we didn't know the issues and the decision. Consequently, I was providing them the wrong information. Communication was needed to get the right information. During the process listening and interpreting are also important."

The MPLA noted that he also talks in examples. He draws things out on the board in simple diagrams. He is also motivated to go the extra step in communication. He will call and ask questions for clarification rather than assume. Also, during a meeting he will say, "We'll continue to work together. " This sets up the situation for continuing to ask questions.

If he is the project manager, the MPLA summarizes the project in a memo. The memo serves several functions. It serves as a reminder, clarifies misunderstandings, serves to organize the events and decisions for himself and others, and allows for rebuttal. The MPLA also tries to provide lots of opportunity for communication—memo's, meetings.

During the interaction, the MPLA tries to be positive all the time, especially when people are negative. He says things like, "We can't do that, but we can do this."

The Analyst noted that the MPLA did not look like the stereotypical accountant and wondered if this had an affect. The MPLA said he tries to get over the bean-counter image by not sitting in a corner. Instead, he tries to be an active player; he doesn't wear the visor out of the office (a joke). He wears unusual ties sometimes, but grey suits; if someone wants to talk he goes and sits in their office rather than waiting for them to come to his office. It is a power issue that he goes to their office; it gives them more power. He also uses a lot of gestures and makes eye contact.(note: The Analyst did not see the gestures).

The Analyst asked about the things that the MPLA did after he had served the customer. The MPLA's belief is that there is not one best way, so when the project is done, you don't shut the door and say it is all done. He said: "You leave the door open. You also document. That has a CYA function and also a communication function. You go back and see if it worked." (He said that he doesn't do enough of this.) There should active follow-up, but there is no set procedure for follow-up. The Analyst asked about the informal communication that he did. The MPLA noted that he often got in conversations and asked, "How did it work?" Then he acknowledged the contribution of the product manager and the importance of it. If there was an opportunity, the MPLA would pat the manager on the back by saying something like, "It wouldn't have worked without your contribution." The MPLA noted that we all need pats on the back from peers, superiors, and others.

Another thing that the MPLA does is to give good product—consequently, he doesn't have to do as much checking up. He also lets the person he was working with know that revisions are OK for the final product, and if someone wants a revision, he keeps smiling and doesn't pout. Body language is important. He has seen others pout when asked to make a revision and that doesn't work.

The Analyst asked what he would tell a new person who was working for him. The MPLA's answer was that the person should as soon as possible learn about the business. The person should learn about the business at all levels, talk to the general manager as well as to those who know how the process works, look at how information goes into the general ledger, look at the cost. The person should get to know the people and the issues, become part of the team, and recognize that for the company to be a success, the individual business must be a success. The person should be creative and take a risk. The company is averse to risk. New things are perceived as risky. Breaking the status quo is difficult. The success ratio with new ideas has not been good.

The Analyst thanked the MPLA and commented that she had gotten a lot of good information and asked if she could call back if she had questions. The MPLA said yes. The MPLA called the next person that the Analyst would interview and walked the Analyst to the elevator.

Interview With the Manager of Cash Management (MCM).

The Analyst explained that the purpose of the interview was to gather information about customer service training. The MCM noted that her group is responsible for investing funds for the company and managing the cash of the corporation. They receive a lot of information, but don't give a lot out. She had questions about why she was being interviewed. The MCM noted that the Vice President of Finance had said that she would be interviewed, but she didn't understand why. The Analyst explained that the Vice President of Finance had selected some managers for the Analyst to interview about customer service.

The Analyst asked the MCM who her customers were. The MCM responded that generally her customers are wire requests, mostly from MSC people in the field. They are agents whose funds are in the wrong place. Her department also uses information from other sources. Most of the information in her department is controlled. Mostly managers in her department give out the information. For example, if she gets a question, "Did the wire come in?" she puts the person on hold for 10 seconds and gives them the response. The MCM asked again why the Vice President of Finance had selected her for interviewing. The Analyst responded that she didn't know exactly why the VPF had chosen her and then explained that the goal was to make sure that training provided needed skills. The Analyst also explained that small behaviors can make a big difference in performance. For example, there is not a lot of difference in the behaviors of Joe Montana and the guy who plays on the U of MN football team, but the small behaviors make a big difference in the accomplishments. For example, maybe Montana sights the ball before he throws it. The Analyst continued to explain that in looking at training, the goal is to identify those small behaviors and teach the winning skills to those involved—this includes looking at the literature, because maybe the sports writers have picked up a behavior that Montana is not aware of, and talking to those who are playing the game.

The Analyst then asked about some things that the MCM did to be proactive when working with customers. The MCM does a lot of analysis. She thinks ahead. She goes to meetings. Even if she doesn't have a direct role at the meeting, she may serve as a reference for cash management. She is also attentive to comments. Involvement and making use of network opportunities are also important.

The Analyst again asked who the MCM's customers were. The MCM responded that 90% of her department's work is with banks and brokerage funds. She also gets information from operations. The Analyst stated that customers can be defined broadly. For example, the CEO has customers. They include people who work for him as well as the board.

The MCM said that in a broad sense, those who are remitting money to to MSC, that is, the banks that provide service and provide functions that allow her department to do what is needed, are customers. Operations is also a customer.

The Analyst asked if the MCM had ever seen examples of times when the customer has gotten wrong information or too much information or too little information? The MCM responded, "In every job there is a balance between cost and quality service. Diplomacy and tact are needed. Sometimes that is because of politics, policies, and procedures. You have to recognize the constraints and what the situation warrants."

The Analyst asked about what behaviors are important in customer service. The MCM responded that it is important for her to understand where the person is coming from so that she knows the objective in getting information. This prevents misdirected responses and not addressing the information at hand. The key is open communication. The MCM finds out what the person's function is and where he or she are coming from. "For example, this is Joe Blow. Then I ask, 'are you from marketing, control, etc. ?' I get his background so I can tailor my response to him."

Cash management is responsible for managing relationships. The MCM stated, "We need to know the company position and posture so we can respond in a manner consistent with the company." The MCM never wants to contradict the company. She stated that although she has contradicted the company in the past, she has never done it on purpose.

The Analyst summarized by saying that some of the MCM's interactions were not the short-term interactions, but longer-term relationships. The MCM knew the company position, and where the customer was coming from before the interaction. The MCM stated that it was important to have the technical knowledge. She said that was why they had a supervisor in her department give answers to the external customer rather than having the clerical people give it.

The Analyst asked about the behaviors that occurred during the interaction? The MCM noted that for internal people, her department tried to solve the problem immediately. She also stated that sometimes they had to wait for the person to tell the whole story. She said that if she couldn't help a person, then she got his or wher name and phone number rather than putting the call on hold again. With the banks, the MCM fostered a relationship. She did business and worked on a personal level. The Analyst asked the MCM what she meant by a *personal level*? The MCM responded with the example that you chitchat before starting the business. For example, she asked questions like, "How'd you like the ball game?" The Analyst asked about the situations when the MCM didn't give the bank her business. The MCM responded that she maintained the relationship. She stated, "You say thanks, but no thanks. You acknowledge the materials that they sent, say why they were not selected (give them feedback), and leave the door open. There may be other opportunities down the road."

The Analyst asked about the kind of things the MCM did after the interaction? The MCM responded that she did not do a lot. She stated, "They'll come to us if it is not what they want. Most reports are to senior management. "

The Analyst asked what the MCM would tell a new person who was working for her. The MCM responded that she had been with Money Systems Company for 5 years and in cash management for 15 years. When she came to this organization she thought that she had seen it all. The MCM brings people in with a knowledge base,provides them with the expectations, and gets them involved with new things. She would tell a new person: "this is a great company. There is lots to learn and lots of opportunities. The new people can involve themselves with control, marketing, accounting, etc. They can learn anything here and have a lot of fun in the process." She would tell a new person, "Keep your eyes open, your ears to the ground, and crunch your numbers."

The Analyst asked if she could call the MCM later if she had any questions, and the MCM said yes. The MCM helped the Analyst find the office of the next person to be interviewed.

Interview With the Manager of Corporate Accounting (MCA).

The Analyst explained that the purpose of the interview was to gather information about customer service training. The MCA explained that sometimes there is a problem with customer service in that the customer doesn't get past the accounting jargon. For example, the past president used to call for information, and she would tell him something, she would know that they were not communicating because there would be long pauses in the conversation. But they could not get around the language problem. She also stated that some people have a superficial knowledge of accounting and the MCA does not want to insult their intelligence by "talking down to them," so language becomes a problem.

The Analyst asked who her customers were. The MCA responded that anybody in the company is a customer. Officers who receive the financial report, the parent company, the subsidiary. Her department helps the subsidiary by reviewing reports so that good service is given regarding turning around reports. Also, every manger is a customer because they are all looking at their costs. There are questions about the summary reports and about the accounts payable.

The Analyst asked about the behaviors involved with customer service and talked about Joe Montana behaviors compared to the behaviors of the U of MN football quarterback. The Analyst asked about behaviors before the transaction. The MCA responded that when she sends a report, she highlights differences in the actual report and what had been expected. This gives the impression that "we're on top of things, and yes, we look at this stuff. This helps people who are maybe afraid to call or afraid to use accounting jargon." When she gets a question, it is usually a phone call. Sometimes she asks, "What can I do for you?" Then she gets all the information down so that she doesn't have to call them back, and she asks, "Can I get back to you later today or tomorrow or is this a rush job?" This last question is a way of prioritizing work. She noted that she sometimes would prefer to wait on the questions. Her department's first priority is to get financial reports to the officers of this company and to the parent company. The Analyst asked what happened in a situation when she couldn't do the work. The MCA responded that this usually doesn't happen, but if she can't meet the customer's need, she would explain why. She also noted that when she called the person back with the information, she reads their voice. "If they are excited, then everything is OK. If they say, 'wel l l', then I check to see if they are unhappy with the numbers or with the report." If they are unhappy with the numbers, there may not be anything that she can do about it. If it is a fact, it is a fact. She tries to be tactful and may tell them how to fix a problem if she knows how to fix it. The customer may have to go through other channels to fix it. An example is if the charge is put to the wrong cost center. Some problems can't be fixed. For example, the budget is done in October and closed out. It can't be reopened in February. It is a policy—even if the amount that was input was incorrect. When she tells people this, she hears sighs. But it is a policy that can't be changed.

If she gave a person an answer, but it was wrong, she hopes that they will come back. In that situation, she apologizes and says she misunderstood and asks, "What do you want?"

The Analyst asked if the MCA did anything in the initial contact to verify that she understood what the customer needed. The MCA responded that she repeats the vendor number and the dollar amount. These are the checkpoints that she uses. If the customer seems confused, the MCA says, "Then this is what you want and what you'll do with it."

The Analyst asked if she (the analyst) were the MCA's employee and was having problems with the customers, what advice the MCA would give? The MCA said that her advice would be to keep a log of who is calling and what they specifically want, and to get as much information as you can. She would tell the Analyst to tell the person, "We'll get back to you," and then to hang up and get help. If there was a problem, she would have the supervisor check the work before calling back or have the supervisor call the person back. For her people, asking questions is better than giving out wrong information, getting frustrated, or wasting too much of their own time.

The MCA also noted that people ask questions that are not in the format that she is used to. She asks them to look at the report , and because she knows the page numbers, she asks them look at a specific page number of the report. The Analyst said that referring to a specific page number of a specific report seemed to be a technique that made the customer's question concrete. The MCA noted that accounts payable could be educated to answer questions on the summary report, but they need the technical knowledge to know how to go from report to report. They need to be shown how the package works together. It would cut down on the time needed for answering questions if they could go from one report to another. This example was different from the president example that she used earlier. The president example was a case of language getting in the way. The MCA tries to get to a common language by pulling out the report and having the customer look at a page number on the report so she can understand. When she doesn't know what they want, she asks what is the purpose, how it would help, how information would look (e.g., the format are they looking for numbers or names?). This gives her a clue about whom to ask for the information.

The MCA also said that the philosophy is important, "the mind set of 'I don't know what you're asking' as opposed to getting the information down and trying to get help."

The Analyst asked if there have ever been situations when people have gotten too much information? The MCA responded that if the accountant doesn't know what is being requested, then the accountant floods the customer with information. She highlighted the importance of understanding what people want when they are asking a question. Ask them questions. Reiterate what they are asking for. Ask why they need the information.

The Analyst asked what happened if the person wanted something that was too big, for example, a project that would take a zillion hours to complete? The MCA responded that she ask them, "How much time did you want me to spend? My understanding is that it will take this long. If they still want it, then I would inform the Vice President of Finance."

The Analyst asked about the behaviors that occurred after the customer service process. The MCA responded that if she had a question about whether she had given the right information, she would call the person and ask if they had gotten it. For example, someone once wanted a report, she delegated it, and hadn't heard, so she called and ask if it had been right. But if she doesn't know about the customer interaction, then she can't do anything. The MCA also said that the department suffered from not knowing what the customer wanted. The customer didn't always know what they wanted either, so her department would give them what they thought the customer wanted, but later they would hear through the grapevine that it was not really right. Or the customer would ask for something really expensive.

This has been a problem with the reorganization. There were two reorganizations. The first one happened in April, and the second one took place in November and became effective January 1. Because new people may need new information, her department asked the managers what information they needed. They don't know. "We tried to be proactive by asking them. Our system is too big for this kind of thing. So we made the changes and then ask for feedback before finalizing. The problem is that our customers don't know what information they need to run the business."

The Analyst thanked her for the information and asked if she could call the MCA if she had a question. The MCA said yes.

DICHOTOMY WORKSHEET: SUBJECT MATTER ANALYSIS

Subject: Financial services organizations
Analyst: Catherine M. Sleezer
Date: February 28, 1990

Sample Dichotomous Terms

good — bad
high — low
strong — weak
complete — incomplete
structured — unstructured
excellent — poor
well — ill

(dichotomous term/subject) Part I | Part II (dichotomous term/subject)

Characteristics of financial services companies

In the past	**In the 1990s**
1. Companies competed in a regulated industry that resulted in a friendly mode of competition (Ballarin, 1986).	1. Companies compete in a recently deregulated industry.
2. The financial services industries were easy to run because they were stable and there were definite rules to follow (Grasing & Hessick, 1988).	2. The number of changes faced by the financial services industry and the importance of the changes has caused at least one writer to use the term revolution to describe the industry (Ballarin, 1986). Specific changes include such things as increased competition, technology, new products, customer changes, economic changes (Ballarin, 1986; Grasing & Hessick, 1988).
3. Most companies were similar to Japanese companies that offered a family atmosphere and lifetime security. Regardless of how good or poor your performance was, you could expect an average raise (Grasing & Hessick, 1988).	3. There have been two reorganizations at Money Systems Company in the last year that have resulted in early retirement for a number of senior managers. Pay is based on performance (information gathered during organization analysis).
4. Regulation of industry tended not to stimulate innovation and flexibility (Ballarin, 1986).	4. Many organizations now spend considerable resources to cultivate and develop these attitudes of innovation and flexibility between key members of the organization (Ballarin, 1986).

Organization characteristics that are not specific to financial organizations

In the past	In the 1990s
5. The model employee was viewed as one who carried out orders (Naisbitt & Aburdene, 1985).	5. The model employee is viewed as the one who takes responsibility and initiative (Naisbitt & Aburdene, 1985).
6. Organizations were structured as bureaucracies (Naisbitt & Aburdene, 1985).	6. Organizations are experimenting with new structures, and people in separate disciplines are not allowed to remain in isolation (Naisbitt & Aburdene, 1985).

Changes in the accounting roles in organizations

In the past	In the 1990's
7. Accounting had a bookkeeper role (Manager of Product Line Accounting).	7a. Accounting professionals are information providers and solvers of business problems (Manager of Product Line Accounting). 7b. Some accountants work on teams to solve business problems.
8. Dissention was not tolerated in financial services companies (Grasing and Hessick, 1988).	

SUBJECT MATTER ANALYSIS
2-AXIS MATRIX WORKSHEET

Subject: Characteristics of a professional support team and financial manager comments
Analyst: Catherine M. Sleezer
Date: February 28, 1990

Interviewees Characteristics of professional support teams	Manager of Product Line Accounting	Manager of Cash Management	Manager of Corporate Accounting
Special Skills Team members have special skills not widely shared by others which are critical in responding to organization needs.	Sees accounting as information providers. Says knowledge of organization situation is important in responding to requests.	Says technical knowledge is critical in helping customer.	Notes that president of company called her for information. Says technical information is needed to go from report to report.
Distinctive Work Cycle A generic work cycle was identified for the professional support team.	Looks for ways to contribute diagnosis. Uses diagrams to propose. Product manager makes decision.	Describes work cycle inconsistent with the generic work cycle—instead she scans, diagnoses, and produces the right answer.	
Cultural Conflict Team members must balance their professional identify and their identify as member of the organization.	Recognizes accounting image and counters it.		Describes how accounting jargon or fear of it can prevent communication.
Seeking Balance The expertise of the team creates cultural conflict between team members and the organization (i.e., language differences).	Perceives that accountants are viewed in the organization as bookkeepers so he is changing his role.		Feels concern for member of organization, but at the same time can't change the books to meet their needs.

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Analyst Catherine M. Sleezer **Approved by** Vice President of Finance

I. There are four major topics in customer service training for accountants at Money Systems Company :

A. Why customer service is important for financial professionals at Money Systems Company.

B. The role of accountants in the organization affects quality and customer service.

C. Background information about the process of customer service

D. Customer service techniques that can be used to influence the quality of the interaction between the contact person and the customer.

II. Why customer service is important for financial professionals at Money Systems Company.

A. In adapting to the major changes that are occurring within the financial services industry, many financial services companies have recognized that serving the external customer is a basis for competing.

1. In the past, financial services companies competed in an environment that had the following characteristics:
   a. Regulation by the government.
   b. Friendly competition among organizations (Ballarin, 1986).
   c. Segmentation (i.e., banks competed with banks, insurance companies competed with insurance companies, etc.) (Ballarin, 1986).
   d. Stability and security within organizations (Grasing & Hessick, 1988).
   e. Little emphasis on creativity or innovation (Grasing & Hessick, 1988).

2. In the 1990s, the financial services industry is characterized as a revolutionary environment. Changes that are taking place in this industry include
   a. Government deregulation (Ballarin, 1986; Grasing & Hessick, 1988).
   b. Economic changes including diminished growth, increased inflation, and increased unemployment (Ballarin, 1986).
   c. Increased competition from companies within the financial services industries and from foreign companies (Grasing & Hessick, 1988).
   d. A blurring of the lines of distinction among companies within the financial services industry (Grasing & Hessick, 1988).
   e. New products in the marketplace (Grasing & Hessick, 1988).
   f. Increased use of technology, especially information technology (Ballarin, 1986).

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g. Changes in customer characteristics with the baby boomer generation becoming a major purchasing factor (Grasing & Hessick, 1988).

3. Adapting to the changes in the industry and in the society have, in turn, caused financial service companies (including Money Systems Company) to make changes. Many financial services companies are now competing for customers based on the strategy of differentiation, specifically by providing high levels of quality and service (Grasing & Hessick, 1988).

B. There is a recognition in financial organizations that internal customers speak for (represent) the external customers (Grasing & Hessick, 1988). The ways that organizations are being structured encourages employees to meet the needs of internal and external customers. For example:

1. Job security is being replaced with company reorganizations and pay for performance.
2. Organizational structures are being changed from a bureaucratic hierarchy to structures that include small teams, direct communication between people who accomplish the work, and individual commitment and ownership of work (Naisbitt & Aburdene, 1985).
3. The size of the clerical staff is being decreased and the size of the technical and managerial staff is being increased (Grasing & Hessick, 1988).
4. The model employee is now being viewed as one who takes responsibility and initiative rather than as one who simply carries out orders (Naisbitt and Aburdene, 1985).
5. Innovation and flexibility are being cultivated among key members of the organization (Ballarin, 1986).

C. To be most effective in helping the company reach its goals, the financial area must adapt to the changes that are taking place within the financial services industry and within the company. Some of the changes that financial professionals must face include the following:

1. Focusing on quality and customer service (Grasing & Hessick, 1988).
2. Working as an information provider and problem solver rather than as just a bookkeeper (Manager of Product Line Accounting).
3. Working on teams to solve business problems (Naisbitt and Aburdene, 1985).

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4. Recognizing the changes that are taking place within the industry and the company, developing a plan for adapting to the changes, and acting.

III. In focusing on quality and customer service, financial professionals should consider their role in the organization.

A. Accounting professionals can be viewed as a professional support team at Money Systems Company. The descriptions that managers in the financial area at Money Systems Company gave of their work were similar to the characteristics identified for professional support teams.

B. Davis-Sacks, Denison, and Eisenstat (1990) identified the following characteristics of a professional support team:

1. Professional support teams had special skills that were not widely shared by others in the organization and that were critical to meeting the needs of the organization.
2. A generic work cycle was identified for professional work teams that had four stages: scanning, diagnosing, proposing, and handing off.
    a. In the scanning stage, "the professional support team lies in wait, antennae extended, for a problem to emerge. . . . The team may be either actively scanning the organization or passively waiting for the phone to ring" (pp. 196-197).
    b. In the diagnosing stage, the support team had to reformulate the problem into the language used by the team. Team members often worked with a set of symptoms from which the members developed an understanding of the underlying problem.
    c. In the proposing stage, the team produced a concrete proposal that the client could implement. The solution proposed by the team had to meet two criteria. It had to be acceptable to the professional support team because it was right, and it had to be acceptable to the client because it looked as if it would work. The team also had to translate the proposal back into a language and format that the client could understand before presenting it to the client for approval.
    d. In the handing-off stage, someone else made the final decision about the team's recommendations and then executed the ideas. Because the team's work resulted in a product that was handed off to someone else, the team members might not see the results of their work or know why their work was rejected or modified. If everything had gone well, the teams existence might not even be highlighted.

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3. The expertise of the professional team tended to create cultural conflict between team members and others in the organization. For example, when the members of the professional support team tried to explain their perspectives, they often seemed to others in the organization to be speaking a foreign language.

4. Professional support teams have to balance their identity as a skilled professional and their identity as an organizational member. Professional team members would often rather become engaged in professional development in their area of expertise than become involved in the organization.

C. Behaviors of financial managers at Money Systems Company that were similar to the characteristics of professional support teams included the following:

1. Financial managers had a specialized skill in finances that was shared with nonfinancial managers upon request.

2. In describing their work, two of the managers described patterns of work.
   a. One manager described a pattern of work that was very similar to the generic work cycle of a professional support team, where he actively looks for ways to contribute to the organization, diagnoses the situation based on his knowledge of the business, uses diagrams to propose solutions, and then lets the product manager make the decision.
   b. One manager who put less emphasis on customer service described a pattern of work where she scanned, diagnosed, and, then, made the decision herself about the best way to solve the problem.

3. The managers in the financial area described conflict between the financial culture and the culture of the organization as being based on the image of an accountant. Some managers perceived that the organization did not value the stereotypical propeller-head image of an accountant and that people were afraid of the the financial language or jargon.

4. When the managers in the financial area described their work, they often described how they balanced their professional identity and their organization identity. For example:
   a. One manager described how he wore grey accountant suits, but some fun ties to fit into the organization.

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b. One manager described situations in which incorrect amounts were sometimes posted. If a manager wants the error corrected after the books have been closed, it is often not allowed by policy. The financial manager noted that she understood both why the non-financial manager wanted the change and why the financial policy did not allow the change.

D. The characteristics of a professional support team relate to customer service because

1. Professional support teams were created to provide the organization with specific knowledge and skills that are critical for addressing special needs.
2. At the same time, the professional expertise and the uniqueness of the professional skills create conflicts between members of the organization and members of the professional support group that must be bridged if the professional support team is to contribute most effectively to the organization.
3. The support teams operate at the pleasure of the internal client (Hackman, 1990).
4. To be most effective, financial professionals must understand their role as part of the professional support team at Money Systems Company, develop a plan for action, and act.

IV. Background information about the process of customer service includes understanding that

A. Clients seldom are simply there for the asking, they have to be acquired or even created (Normann, 1984).

B. It is important for companies to play an active role in detecting and developing their clients (Ballarin, 1986).

C. Most interactions between the contact person and the client are predictable ,but occasionally a crisis will have to be handled not only with technical skill but also with personal tact and wisdom (Normann, 1984).

D. Most services are the results of social acts that take place between the contact person and the customer where the skill, motivation, and tools of the contact person and the expectation and behavior of the client influence the process and the outcome of the interaction (Normann, 1984).

E. Customer service consists of listening to the customer's needs and translating the needs into products or services. The customers may not always know what they want.

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F. In a service interaction, the customer is the consumer as well as part of the service delivery process. Normann (1984) identified a number of ways in which clients can participate in the collaborative process, including

1. Specifying the service.
2. Co-producing the service.
3 Judging the quality of the service.
4. Maintaining ethos by giving feedback to the contact person about interesting experiences and excitement.
5. Developing the service system (this includes bringing to light weaknesses in the system).
6. Selling or marketing the service to other clients.

G. Normann (1984) noted that the quality that the customer experiences is created during the face-to-face interaction between the contact person and the customer. Normann identified the following ways for the contact person to improve this interaction:

1. Create empathy with the customer .
    a. When the customer lacks the knowledge needed to judge the quality of a service, he or she often uses as a proxy the amount of interest and emotional empathy demonstrated by the contact person in making a judgment.
    b. The customer often has difficulty in evaluating the quality of a service. This is especially true in the case of professional services where a knowledge gap exists between the professional person and the customer.
    c. Slogans such as We Try Harder" and We Work for You are excellent at demonstrating interest and empathy. However, when a slogan is used, the customer may try to create situations to see if the slogan is actually being practiced.
2. Use tools to create and enhance the microsituation interaction and motivation.
    a. During the service interaction, the contact person can not demonstrate the whole complex service that is being offered. The skilled contact person will find an opportunity to show what he or she can do for the customer. Delivering a small aspect of the actual service during the interaction causes the customer to feel increased confidence in the contact person and the company's abilities.

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b. Systems and tools can reinforce the position of the service provider and also create and enrich the interaction with the client. As an example, airline personnel have a reason or pretext for interacting and talking with the customers when distributing magazines before a flight.

3. Obtain feedback on the service.
   a. Feedback is necessary for influencing quality.
   b. The interaction between the customer and the contact person creates opportunities for employees to receive positive feedback about their services.

4. Manage the customer by shaping his or her expectations.
   a. The dynamics of the social interaction between the customer and the contact person affects the expectations of the customer and prepares the customer to contribute as much as possible to the situation.
   b. When customers contribute to the situation, they create their own positive experiences.

5. Express an attitude to the customer that matches the attitude of the company or function.
   a. The quality that the customer experiences increases if the entire organization has a positive, open, and service-minded climate and if this attitude is displayed to the client.

V. Each of the customer service techniques described above has been used by the financial professionals at Money Systems Company.

A. The following are examples of creating empathy with the customer:

1. One manager recognized that the customer doesn't always know what to ask for. So he now puts himself in an empathy role to say, "This is what I heard you say. Here's what we can provide."

2. One manager described how he sits in on meetings so that he can know what the customers mean when they say something. By sitting in on business meetings, he can identify business issues and be in on the start-up and know what is going on in the business.

3. One manager described how he uses the language, dress, and thinking of a business manager rather than that of an accountant.

4. One manager attends meetings even if she does not have a direct role so that she can serve as a reference on questions related to her area of expertise.

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5. A manager described how she tailors her responses based on where the customer is coming from.
6. One manager makes sure that she maintains the the personal relationship necessary for doing business. For example, she noted that she might engage in some chitchat before starting business.
7. One manager said that she is careful about the language she uses when answering customer questions. She has observed that a customer can be insulted if she uses financial language that is too complex or too simple for the customer's understanding.
8. One manager communicates to the people who report to her the philosophy of writing down all the information related to the customer's request and then trying to help.

B. Examples of using tools to create and enhance the microsituation interaction and motivation at Money Systems Company include the following:

1. In working with the customers, one manager stated that he suggests an idea and then gives the manager a concrete example of it. The manager also noted that some of his customers know what they want and some don't. If the customer's idea won't work, this manager comes up with an alternative.
2. One manager said that he talks in examples and draws diagrams on the board.
3. When managing a project, one manager uses a memo to summarize the project. This serves as a reminder, clarifies misunderstandings, organizes the events, and allows for rebuttal.
4. One manager often gets questions from people in a format that she is not used to. She uses the report in question as a guide to make the customer's concern concrete for both the customer and herself.
5. One manager said that when she did not know what the customer wanted, she asked questions such as, What is the purpose of the information? How will it help? and What will the information look like?
6. Two managers said that they try to get all the information and answer the customer's question over the telephone rather than transferring the customer to another contact person.

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7. One manager said that when the numbers on a report from her department differ from what she thinks the customer will be expecting (usually because of timing), she highlights differences in the actual report and what should have been before sending the report to the customer. This gives the customer the impression that her department is "on top of things."

C. The following are examples of how the technique of feedback on the service has been used at Money Systems Company:

1. One manager calls a customer and asks for clarification rather than assuming that he knows what the customer wants.
2. One manager described how during a meeting, he will say , "We'll continue to work together." This sets up the situation for collaboration and for continuing to ask questions.
3. During informal communication, the Manager of Product Line Accounting often asked, "How did it work?"
4. One manager described how when he gets feedback that revisions are required, he keeps smiling and uses body language that says that he would like to do the revisions.
5. One manager described how she listens to responses when she gives information. If the person is excited, then everything is OK, but if they say, "Wel l l. . .," then she checks to see if they are unhappy with the numbers or with the report.

D. Manage the customer by shaping his or her expectations. Examples of this technique used at Money Systems Company include

1. The Manager of Product Line Accounting educates his customers about the potential that the financial function can offer, what they can expect from the financial function, and what it will cost.
2. During an interaction, one manager described how he tries never to say never. Instead, he may say, "No, I can't give you that now, but I will do research and will get back to you by such and such date." He makes sure that the date meets the customer's expectations.
3. One manager noted that when discussing the project with customers, he acknowledges the contribution that they have made to the success of the project.

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4. One manager said that she maintained relationships with her customers by acknowledging the materials they sent, giving them feedback, and leaving the door open for other opportunities.

5. One manager noted that he does the work that he has promised in the time frame that he has promised.

E. Express an attitude to the customer that matches the attitude of the company or function. The attitude of the financial function is collaboration. The following are examples of how this technique has been used at Money Systems Company:

1. One manager communicates to his customer the philosophy that "we want to help; 99% of the time we can."

2. One manager communicates to the people who report to her that they should get as much information as possible, tell the person you will get back to them, and then get help. She tells them that asking questions is better than giving out wrong information, getting frustrated, or wasting too much of their own time.

Subject Matter Description

Job or Program Customer Service for Financial Professionals **Page** 11 **of** 11
Location Money Systems Company **Effective Date** 2/28/90
Department Accounting **Cancels Sheet Dated** NA
Analyst Catherine M. Sleezer **Approved by** Vice President of Finance

Resource List

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Interviews

Manager of Product Line Accounting

Manager of Cash Management

Manager of Corporate Accounting

Appendix L

Customer Service Survey

«DATA trainees»

March 19, 1990

Dear xxxxxxx,

I am a research assistant at the University of Minnesota Training and Development Research Center. I am currently working on a project with the Vice President of Finance to determine the need for customer service training for financial professionals at MSC. Part of the process of determining training needs includes identifying the characteristics of the job holders and their learning needs related to customer service. This information can then be used to design training that meets the specific needs of the job holders.

As a job holder who may participate in this customer service training, please answer the questions on the enclosed survey. The number of people who are being asked to complete the survey is small. Consequently, your responses to the questions are important to the success of the project. Your responses will be combined with the other survey responses and used in planning and in conducting the training. Individual responses will not be identified by name. The surveys, however, have been numbered to allow for follow-up of the surveys that are not returned. If you have questions or concerns, please feel free to contact me at 470-0324. Please mail the completed survey to me in the enclosed envelope by March 23.

Thank you,

Catherine M. Sleezer

Customer Service Survey for Financial Professionals at MSC

1. Is providing service to customers part of your job?

2. Who are your customers?

3. How is the job performance of providing customer service measured at MSC?

4. What training have you received in customer service?

5. To the financial professionals at MSC, how important is providing customer service? (circle one)

unimportant	not very important	average	somewhat important	very important

6. Please estimate the present level of skill that financial professionals at MSC have in providing customer service. (circle one)

no skills	some skills	average	skilled	very skilled

7. Rank the following possible training topics based on how important they are to you with #1 being the most important and #4 being the least important.

RANK TRAINING TOPIC

____ Why customer service is important for financial professionals.

____ The role of professional support teams in the organization.

____ Background information about the process of customer service.

____ Specific techniques that can be used at MSC to improve customer service interaction.

8. Please describe an instance of outstanding customer service that has involved financial professionals at MSC.

9. Please describe an instance of poor customer service that has involved financial professionals at MSC

Please use the attached envelope to return the survey to Catherine M. Sleezer. Thanks.

Analysis of Customer Service Survey for Financial Professionals at Money Systems Company

Eleven financial professionals at MSC were asked to complete the Customer Service Survey for Financial Professionals at MSC. Of the 11 surveys returned to the analyst, 10 surveys were completed and 1 survey was partially completed.

The responses to the survey items reflected the current perspective that financial professionals at MSC had about customer service. The responses also provided information about the characteristics and capabilities of the financial professionals relative to the topic of customer service.

The responses to the open-ended questions were analyzed by grouping the responses and looking for patterns. The responses to forced-choice items and the ranking items were analyzed by assigning numerical values to the responses and using descriptive statistics.

1. Is providing service to customers part of your job?

Each person who responded agreed that providing customer service is part of his or her job.

2. Who are your customers?

Each respondent identified more than one customer. Several individuals refer to management as a customer.

3. How is the job performance of providing customer service measured at MSC?

Five of the respondents suggested that job performance is measured at least in part by feedback, satisfaction of customers, and complaint. Three people mentioned performance evaluations. This raises the question of whether customer service is part of all performance evaluations.

4. What training have you received in customer service?

For the most part people said that they have not received training in customer service. Four people indicated that they learned on the job. Three people indicated that they had learned customer service in a previous job or at school.

5. To the accounting professionals at MSC, how important is customer service?

This item required the individual to select a descriptor from the following choices: unimportant, not very important, average, somewhat important, very important. The descriptors were scaled. Responses that were marked unimportant received 1 point, not very important received 2 points, average received 3 points, somewhat important received 4 points, and very important received 5 points.

Customer service was somewhat or very important to 9 of the 11 people surveyed. The average of all the responses was 4.27 on a 5-point scale.

6. Please estimate the present level of skill that financial professionals at MSC have in providing customer service.

This item required the financial professional to select a descriptor from the following choices: no skills, some skills, average, skilled, and very skilled. The descriptors were scaled. Responses that were marked no skills received 1 point, some skills received 2 points, average received 3 points, skilled received 4 points, and very skilled received 5 points.

In terms of the skills, 6 people said that financial professionals at MSC are skilled, 2 said very skilled, and 1 said average and 1 said some skills. The average of all the responses was 3.91 on a 5-point scale.

7. Rank the following possible training topics based on how important they are to you with #1 being the most important and #4 being the least important.

In analyzing the ranked choices, each individual's first choice was given 4 points, the second choice 3 points, the third choice two points, and the fourth choice one point. The points that were given to each topic were totaled. In addition, the number of times that an item was ranked as being the most important was noted. Specific techniques that can be used at MSC to influence the customer service interaction has 33 points, including four most important votes. The role of professional support teams in the organization has 26 points, including three first place. Why customer service is important for financial professionals at MSC has 22 points, with only one first place vote. Background information about the process of customer service got 19 points, including two first place votes.

8. Please describe an instance of outstanding customer service that has involved financial professionals at MSC.

Each person provided one example for this item. By definition, customer service requires looking at a behavior from the customer's perspective. Most of the examples did not describe the situation from the customer's perspective. Some of the examples raised questions about whether a behavior really involves customer service. For example, doing extra work is customer service only if it meets the need of the customer. In and of itself, doing extra work without complaint is not customer service.

Three people relate good or outstanding customer service to meeting deadlines. Five people described cooperation between the financial department and another department or area in solving a problem as an example of good customer service.

Nobody described an example of the customers saying that the service was good or of negotiating with the customer the service that was needed.

9. Please describe an instance of poor customer service that has involved financial professionals at MSC.

Often the good and poor examples given by an individual were opposites of the same thing. For example, good customer service was meeting deadlines versus poor of not meeting deadlines, good was taking a lot of time to help versus poor of giving no help, good took time to do the research versus poor didn't know where to look, good took time to understand a report and get it on time versus. the poor response of needing to be asked for things three or four times, and good worked overtime to get the answer versus. the poor response of quitting at 4:30.

These examples focus on time and effort rather than on customer service.

Specific Responses to Open-Ended Items

1. Is providing service to customers part of your job?

- Yes.
- Yes.
- Yes.
- Yes.
- Yes.
- Yes, it is my job.
- Yes, providing customer service is a required part of the job of each financial professional.
- Providing help and answers to others in the company for the good of the company is part of my job.
- Yes, customer service is applicable to all jobs in one form or another.
- Yes and no; I think of myself as part of the corporation and as such I should help those in the corporation, just like they should help me, because I am part of the corporate team also.
- Yes, but it isn't written into the job description—it's an assumption.

2. Who are your customers?

- Prine accounting personnel, management of MSC.
- Management of MSC and Prine Corporation.
- My customers are the people who come to me for information, for example, other employees of MSC, Prine and the subsidiary, the auditors, and federal and state tax auditors.
- (1) Product management for our three lines of business, (2) Financial and Tax Accounting, (3) Information systems, sales & region administration.
- The accounting area helps other areas of the company. Although I feel we are all workers of the same company, I suppose one could call them customers.
- Users of financial information and statements. Both internal and external.
- Vendors and employees.
- The financial readers, shareholders, and stakeholders. Other customers are those whose cost centers are affected by my department.
- Everyone in the company (all employees), various Federal, State, & Local taxing authorities, benefit plan administrators, departments that require reports, pensioners, past employees.
- Three levels: (1) senior management, (2) middle or operating management, (3) Prine internal audit department. The primary focus is on helping middle managers do the job. Senior managers assure that controls are in place. Prine would be the watchdog role.
- Bankers, brokers, agents, senior management, various departments.

3. How is the job performance of providing customer service measured at MSC?

- Not measured directly, indirectly measured in terms of phone calls and/or other means of complaints and questions.
- I don't know.
- Job performance in providing customer service is measured as part of the employees' overall effectiveness in their jobs through a performance appraisal.
- It is measured by the satisfaction of our customers and the customers' attitudes of the department that are formed not only from results but from perceptions too.
- How I interact with other areas in the company is mentioned in my performance review.
- There seems to be no subjective measurements at this time for customer service measurement. However, a good measurement now is the feedback received from information users.
- Relatively low.
- The only measurement I can think of is at your review if you have done your job well and accurately, you receive an increase in salary. By doing our job accurately, the cost centers, financial readers, shareholders, and stakeholders have an accurate picture of how well our company is doing.
- Overall, I would say it would be how well the company does. On a smaller scale, it is not measured at all . . . or at least we don't hear about it.
- (1) Limited measurement, at best, from senior management, (2) middle managers measured by comments back, steps implemented or assistance requested. Measured informally. At times post audit questionnaires have been sent to the auditees (middle managers) to test our level of service, (3) measured in number of reports, days to complete, follow-up audits initiated.
- No news, good news.

4. What training have you received in customer services?

- None.
- Experience has been the teacher.
- My training has included a seminar at a previous employer and on-the-job practice.
- No formal customer service training per se except for some related experiences in college courses. What I'm saying here is that I've never been to a course or seminar exclusively for customer service, but you find this being discussed all the time in department meetings, magazines, etc.
- None.
- Not sure specific customer service training is necessary. It is an attitude which needs to be promulgated from management down. I believe everyone knows how to provide customer service, but examples and reinforcements of the attitude need to be stressed at all levels of management.

- None.
- I believe as accountants our training comes about just because of the nature of our job.
- On the job in a family business years ago. No formal seminars, classes, or training.
- None.
- No specific orientation.

8. Please describe an instance of outstanding customer service that has involved financial professionals at MSC.

- When the budget reports for 19?? were finalized and ready to be formally distributed, meetings were set up with all the VP's to explain the reports and answer any questions about new formats or structures.
- Cooperation, to resolve a corporation-level problem, between groups.
- At the end of the calendar year, a large number of schedules had to be prepared for the auditors in a very short span of time. The financial professionals did an outstanding job of meeting these deadlines.
- Just recently, I needed a report on an emergency basis. I went and talked to the individual who could provide the report. She was very willing to help, took the time to make sure she understood exactly what was needed and told me when I could expect it. The report was exactly what I needed and was delivered on time.
- Many nights accounting professionals stay late to get transmissions out to Prine, work with the auditors, and help other areas with their accounting needs.
- Financial employees at MSC worked many late and hard hours to prepare financial information that was concise, typed, and easy to read during the sale of a subsidiary. The work was higher in quality and timing than was minimally necessary.
- An A/P [accounts payable] clerk took a lot of time to help another department with a project after someone had left in that department. It took days of research but she did it with no complaints.
- When my manager has argued successfully with auditors to reduce or negate an audit on our books.
- Outstanding customer service happens when it is transparent to the customer, as in updating a computerized system. Good customer service also occurs when deadlines are met or completed ahead of time.
- Internal audit assisted official checks in resolving a dispute of a customer's.

9. Please describe an instance of poor customer service that has involved financial professionals at MSC.

- Because of poor communication with our subsidiary and our subsidiary's external auditors, unaudited year-end financialal reports (sent out to states on a quarterly basis) were sent out about 30 days late.
- When the new accounts payable system was installed a couple of years ago, the person who was accounts payable supervisor at the time was not service oriented, and customer service was not the best.
- Unwilling response to request for needed information from areas outside the accounting department. Lack of follow-up from the accounting department.
- A policy was changed in the accounting area that affected other areas of the company. No memo was sent out to these other areas stating this change. This oversight cost these other areas a lot of extra time and frustration.
- To me the most frustrating thing for our customer is when information is promised by a certain date and is not delivered nor is an explanation provided. The information is received after asking 3 or 4 times.
- Communicating with our subsidiary about the journal entries I am putting through their books.
- When a file clerk was asked for some help and she started yelling at an outside auditor that she didn't know where to look.
- A customer was told she could not receive information that day because working hours were over at 4:30, this in spite of the fact that it was conveyed that the information was important.
- Indecision, missing deadlines, lack of follow-up. These have all plagued the accounting area at one time or another, and they continue to do so.
- Budget information is disseminated poorly, and controls to ensure it is entered correctly failed.

Appendix M

Final Report to Money Systems Company

Needs Assessment
for Management Development Training
at Money Systems Company

Final Report

Prepared for Money Systems Company

by

Catherine M. Sleezer

Research Associate

Training and Development Research Center

University of Minnesota

April 27, 1990

Executive Summary

This report details the findings of the training needs assessment initiated by the Human Resources Department at Money Systems Company in 1989. The goal was to connect training to the organization's bottom line by identifying the specific knowledge, skills, and attitudes that managers need if they are to help achieve the organization's current goals and mission. In addition, the project involved documentation to better understand the needs assessment process for research purposes. There were three phases to this project.

Phase 1 focused on determining where in the organization the training emphasis should be placed. Most of the decision makers who were interviewed during this phase talked about the need to change the way work is done at Money Systems Company so that the company could compete more effectively in the marketplace. Four training needs were prioritized as key. They are (a) decision making, (b) planning, (c) project management, and (d) customer service training for financial professionals. The value of the performance improvement that could be expected to be gained from implementing these training programs was estimated using the most conservative estimates. Each of the four programs was forecast to add financial benefit to the organization. Customer service training for financial professionals was recommended for implementation.

Phase 2 focused on identifying the specific customer service knowledge, skills, and attitudes needed by financial professionals. The lack of customer service affected the amount of information customers were given, the timeliness of the information, and sometimes whether the customer was helped at all. Financial professionals described instances when their customers were unhappy. These instances occurred when financial professionals tried to serve their customers by providing the information they thought the customer would want rather than by asking the right questions and then providing exactly the information needed. As a result, customers sometimes got useless information, sometimes could not get the needed information before reaching a crisis state, and sometimes got the appropriate information and did not know it.

Phase 3 focused on determining which employees needed training and the kind of training they needed. The findings were that training should be provided for all of the individuals who were surveyed. The training topics should include background information about the process of customer service, why customer service is important for financial professionals at Money Systems Company, the role of the professional support teams in the organization, and specific customer service techniques that can be used at Money Systems Company.

To be successful, Money Systems Company must stay focused on its financial bottom line. Managers must have timely access to the financial information they need. According to the financial professionals who were interviewed, this level of service is not always provided. Clearly, financial professionals at Money Systems Company could contribute more toward helping Money Systems Company meet its business needs. Training in customer service would be a good starting point in helping them to make this contribution.

Final Report

This report details the findings of the training needs assessment initiated by the Human Resources Department at Money Systems Company in 1989. It explains the purpose, the process and findings of the needs assessment, the significance of the findings, and the recommendations for future action.

Purpose

The purpose of this project was to determine and prioritize the training needs of managers at Money Systems Company. The goal was to connect training to the organization's bottom line by identifying the specific knowledge, skills, and attitudes that managers and middle managers need if they are to help achieve the organization's current goals. In addition, the project involved documentation to better understand the needs assessment process for research purposes.

The method used to determine the training needs at Money Systems Company was to systematically implement the Performance Analysis for Training (PAT) Model. The PAT Model is a three-phase process for identifying organization performance needs that should be addressed with training.

Phase 1: Organization Analysis

The focus of this phase is on where in the organization the training emphasis should be placed. In this phase, the mission and goals of the company, the behaviors and activities that will be required to achieve the goals, and the training and nontraining causes of the behavior are identified. In addition, potential training opportunities are prioritized, and the financial benefits of selected options are projected.

Phase 2: Work Behavior Analysis

The focus of this phase is on identifying and documenting the specific behaviors needed to accomplish the work and to achieve the opportunities identified in Phase 1.

Phase 3: Analysis of Individual Capabilities

The focus of this phase is on determining which employees need training and identifying the kind of training they need.

Process and Findings of the Needs Assessment

The following section details for each phase how information was gathered and the findings.

Phase 1: Organization Analysis

The current training programs had been developed based on intuition rather than analysis. In meetings with the Manager of Training and Development and the Vice President of Human Resources, it was determined that the purpose of the needs assessment was to identify management training needs that, if addressed, would contribute to the organization's current performance goals.

Information was gathered by three methods: (a) interviewing the key decision makers who had been identified by the Vice President of Human

Resources and the Manager of Training and Development, (b) observing how work was done at Money Systems Company, and (c) reviewing written records.

Most of the decision makers who were interviewed during this phase talked about the need to change the way work is done at Money Systems Company so the company could compete more effectively in the marketplace. The vice presidents who were interviewed identified the current goals of the company as follows:

- Managing a more complex organization.
- Decreasing reaction times to meet business goals.
- Increasing product sales.
- Developing new products.
- Improving the process by which new products are developed.

A number of training needs were identified in this process. All of these training needs were listed in an in-process report for Phase 1 that was reviewed with the Vice President of Finance and the Manager of Training and Development. In the report, the analyst identified the three training needs that decision makers at Money Systems Company had identified as having priority based on their effect on organizational productivity. The training needs are (a) decision making, (b) planning, and (c) project management.

Four nontraining issues were also identified that could impact the effectiveness of potential programs to address the identified training needs:

1. At Money Systems Company, decisions are made by senior management and carried out by managers lower in the hierarchy. As the organization has become more complex, senior managers are putting in long hours to keep up with the decision making. They face issues of "putting out fires" and lack of time. At the same time, midlevel managers are unable to take

on some of the decision making because they lack the skills, information, and authority to make many decisions. Training midlevel managers in decision making, that is, providing them with the knowledge and skill, will not improve the organization's bottom line unless these managers are also given guidelines about what decisions to make, appropriate information, decision-making authority, criteria upon which the decisions will be judged, accountability for results, and rewards for successfully implementing the decisions.

2. Training in project management was often mentioned as a skill that midlevel mangers needed. However, some managers have these skills and do not use them at Money Systems Company because such behavior is not appreciated or in some cases, allowed by the culture.

3. Lack of teamwork between the marketing, the sales, and the sales training areas resulted in the sales force not receiving information necessary for maximizing sales of products.

4. Although increasing sales is a major need for Money Systems Company, training may not be the answer. Nontraining factors that could influence sales performance include the following: (a) sales managers and directors are unclear about their future role in the company; (b) the amount of paper work and red tape involved in sales is significant (e.g., twenty pieces of paper for one installation); (c) a lack of consistent methods for installing products sometimes requires repeat visits to the agent and the additional paperwork, travel, and expense; (d) the incentive system lacks consistency; and (e) retail managers are not as motivated to sell as they could be. Unless these issues are also addressed, sales training will not have the expected impact on performance.

After reviewing the in-process report, the Vice President of Human

Resources requested that the Vice President of Finance and a regional manager also be interviewed to determine their perceptions of training needs. He determined that the president of the company should still not be interviewed because of the other demands on his time. It was also decided that a cost-benefit analysis should be calculated for each of the needs.

A regional manger and the Vice President of Finance were interviewed. Both the regional manager and the Vice President of Finance identified training needs and nontraining needs similar to the ones identified in previous interviews. In addition, the Vice President of Finance perceived that financial professionals needed to learn new skills and attitudes related to customer service. The analyst also asked the Vice President of Finance to help estimate the financial value of the performance improvement that could be expected from implementing the four training programs: decision making, planning, project management, and customer service training for financial professionals. The Forecasting Financial Benefits Model was used in making these calculations.

The value of implementing each of the recommended programs was compared to the value of not implementing the training program. Using the most conservative estimates, the predicted annual performance values for implementing each of the four programs were as follows: (a) decision making, $531,200; (b) planning, $26,152; (c) project management, $228,750; and (d) customer service training for financial professionals $10,372. The predicted value for not implementing the programs was zero or a negative value. To determine the financial benefit to the company, the costs of the training program must be subtracted from the performance values. The bottom-line benefit for these training programs could not be determined because the training department staff had not completely gathered the cost information.

The final report for Phase 1 of the project was submitted to the Manager of Training and Development on December 26, 1989. Because of a prior commitment, the Vice President of Human Resources was unable to attend the meeting to discuss the results of Phase 1 of the needs assessment, and a tentative date was set to discuss the findings with him later. The report included a recommendation to provide training in decision making, planning, and project management for executives and midlevel mangers and customer service for the financial professionals in the company. During that meeting, the Manager of Training and Development asked which of the four needs should be addressed first. The analyst answered that because of the recent reorganization and the general organization climate, employees and their managers could be expected to perceive training for achieving improved performance as threatening. After a training program has been implemented, and employees find that they are able to use the knowledge and skills to accomplish organization goals and be rewarded for their achievement, then training becomes substantially less threatening.

Given the environment at Money Systems Company, customer service training for financial professional was the most doable project. A quick, low-cost success could set the stage for the larger, more complex training programs. Training, in this case, could clearly be linked to changes in individual performance.

In addition, the Vice President for Finance understood that training employees in how work is done at Money Systems Company and holding the them accountable would affect the bottom line. He was willing to work with the training department, to support the training effort, and to evaluate both the training and his managers based on performance. He was also willing to address the nontraining issues of feedback and rewards for performance. Without such support, individuals may learn the new knowledge, skills, and attitudes in training, but fail to apply them on the job to improve performance. The other three training programs would require the same kind of management support, but from a larger number of managers. The analyst believed that this support for training for performance did not exist at the current time for the three larger programs, but that a quick success could set the stage for additional management support.

Because of the support from the Vice President of Finance, the financial area could also serve as the initiation point for other training programs that were identified, including decision making and planning.

The Manager of Training and Development decided that the analyst should begin analyzing the specific behaviors that financial professionals needed to provide good customer service.

Phase 2: Work Behavior Analysis

Phase 2 of the project consisted of job analysis to identify the specific customer service knowledge, skills, and attitudes that were needed by financial professionals.

As the first step in this process, the analyst interviewed the Vice President of Finance. He had heard comments from his area's customers and from the financial professionals that led him to believe that other company managers were not always getting the information from his department that they needed.

As the second step in this process, the analyst began to gather information about the specific customer knowledge, skills, and attitudes that were needed. The Vice President of Finance acquired the Position Description

Questionnaires (PDQs) from the Human Resources Department and gave them to the Manager of Training and Development. The Vice President of Finance also identified three financial professionals to be interviewed, contacted each person, and described the project. The analyst called each of the three financial professionals and set interview dates.

On January 29, the analyst met with the Vice President of Human Resources and the Manager of Training and Development to review the final report for Phase 1. Although the final report was very similar to the in-process report that he had approved, the Vice President of Human Resources stated that he was not satisfied with the report. At the end of the meeting the Manager of Training and Development was asked to recommend the next step in the needs assessment process. One week later the analyst learned by telephone that the Manager of Training and Development was no longer employed at Money Systems Company.

Because the analyst had set interview dates with the financial professionals, she discussed the latest development with the Vice President of Finance. Both agreed that quitting the project at this point meant a lot of wasted effort. Because of the relatively small amount of work needed to determine the customer-service training needs, a decision was made to complete the project. The Vice President of Finance agreed to serve as the decision maker for Phases 2 and 3 of the project, with the understanding that, depending on the findings, he would personally present the training during regular meetings with his staff or he could seek funding for a more extensive program.

The required knowledge, skills, and attitudes for the jobs of financial professionals were identified through (a) review of company documents (PDQs), (b) interviews with financial professionals at Money Systems Company, and (c) review of the literature on customer service in the financial industry. The Vice President of Finance identified two financial managers at Money Systems Company who were perceived to be exemplars in customer service and a manager who had average skills in this area. During the interviews, the financial professionals described their practices related to customer service. The analyst compared the practices of those with exemplary skills to the practices of the employee with average skills. All the practices were compared to the practices described in the customer service literature.

The findings were that the exemplars asked their customers questions about what they needed and had a goal in mind of providing the financial information that managers could use to make business decisions.

The analyst also asked each financial professional to describe instances when the customers were unhappy. The analyst noted that these instances occurred whenever financial professionals tried to serve their customers by providing the information they thought the customer would want, rather than by asking the right questions, discovering the customer's needs, and then providing the exact information needed. As a result, customers sometimes got useless information, sometimes could not get the needed information before reaching a crisis state, and sometimes got the appropriate information and did not know it. In several of the examples, the financial professionals described how the lack of information resulted in crisis times for managers. In one example, the financial professional found out through the grapevine that the customer did not get the information that was needed and was angry long after the event had passed and something could have been done to correct the problem.

The finding of Phase 2 was that the lack of customer service affected more than the amount of information other managers were given. It also affected the timeliness of the information they were given and sometimes whether the customer felt helped at all.

Phase 3: Analysis of Individual Capabilities

Phase 3 of the project consisted of determining which employees needed training and the kind of training they needed. A Customer Services Survey for Financial Professionals at Money Systems Company was used to gather this information. The survey was designed, pilot tested, and administered to 11 managers and supervisors in the financial services area. The analyst mailed the survey to the financial professionals on March 19 with a cover letter that ensured anonymity for each employee. Respondents mailed their completed surveys to the Training and Development Research Center for analysis. The surveys had been coded so that respondents who did not returned a survey could be reminded by telephone of the importance of the survey. All of the surveys were returned.

Analysis of the survey results showed agreement among the respondents that providing customer service was part of their jobs. In fact, customer service was somewhat or very important to 9 of the 11 people surveyed. Each respondent identified more than one customer. Several individuals identified management as their customer.

Analysis of the survey also showed that few respondents had received training in customer service. Most of the respondents rated their ability level in customer service as skilled, average, or some skills. Only two respondents rated themselves as being very skilled. This self assessment of skill was not consistent with the examples of good and poor customer service that were provided by the respondents.

By definition, customer service means looking at a situation from the customer's perspective and meeting the customer's needs. This understanding was seldom evident in the examples. Instead, the respondents provided as examples of customer service doing extra work or meeting deadlines. But doing extra work is customer service only if it meets the needs of the customer. In and of itself, doing extra work is not customer service and, in fact, could be an example of wasted effort and resources.

The majority of the respondents answered the item about how customer service is measured with the use of adjectives such as indirect, limited, or no measures. Analysis of the responses also indicated that the feedback on performance reviews sometimes addresses customer service issues and sometimes does not.

The major findings of Phase 3 were that financial professionals at Money Systems Company need to learn new knowledge, skills, and attitudes related to customer service. Characteristics of the respondents include: (a) financial professionals perceive customer service as important, (b) financial professionals self assessment of skill is not consistent with the understanding evident in their examples, and (c) financial professionals rated general information about customer service and specific information about using the skills at Money Systems Company as important. These findings should be used in designing the customer-service training. In addition, the training should address the following topics:

1. Why customer service is important.
2. Background information about the process of customer service.

3. The role of the professional support team in the organization.
4. Specific techniques that can be used at Money Systems Company to influence the customer service interaction.

Most of the training time should be spent on the third and fourth topics.

In addition, the survey also established that there are currently few measures or consistent rewards for providing good customer service. Also, the feedback related to customer service is sporadic. The survey and the analysis survey findings were reviewed in detail with the Vice President of Finance.

Significance of the Findings

Money Systems Company is in the process of adapting to changes in the marketplace. In addition, the organization is also adapting to changes that have occurred within the company, such as the change in top management. To stay focused on its financial bottom line during these changes, managers must have access to the financial information they need at the time they need it. According to the financial professionals who were interviewed during this needs assessment, this level of service is not always provided.

The organization's goal of competing strongly in the marketplace will require teamwork and a proactive view on the part of all managers. The organization will gain from having financial professionals who look beyond questions of whether all the numbers are in the right columns to questions of whether the numbers in the columns will give managers at Money Systems Company the information they need to make sound business decisions.

Recommendations For Future Action

Clearly, Money Systems Company needs the help of financial professionals in achieving its business goals. Training in customer service will help the financial professionals to make this contribution. The specific knowledge, skills, and attitudes that should be provided in training are detailed in the Subject Matter Description and Analysis of the Customer Service Survey which were reviewed with the Vice President of Finance. These documents also contain anecdotes and "stories" about what works and what does not work at Money Systems Company.

For customer service training to be most effective, learning during training should be measured, and performance before and after training should be measured. In addition, the nontraining issues of measurement, reward, and feedback should be addressed.

Because the attitude in the financial area is one of wanting to change behavior to make a better contribution to Money Systems Company, training and nontraining changes beyond the scope of this customer service project should be considered. For example, decision-making, planning, and project management training should be considered.

Appendix N

Organization Characteristics

THE RULES OF INFLUENCE AT MONEY SYSTEMS COMPANY [*]

Insiders who want to learn the ropes, that is, to discover the rules for influencing others in their group, can do so by paying attention to what's going on around them and noting patterns of behavior.

The analyst answered the following questions related to the rhetorical rules at Money Systems Company.

Rules That the Analyst Should Know

1. Who is it necessary to influence at Money Systems Company to accomplish which important goals—personal and organizational.

The important people to influence at Money Systems Company are the President, the Vice President of Finance, the Vice President of Human Resources, and the Senior Vice President. The President has the formal decision-making authority, the Vice President of Finance has the historical perspective on what has worked in the "pit" at Prine, Inc.; the Senior Vice President has the historical perspective and control of the sales force; and the Vice President of Human Resources has responsibility for the reward system.

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[*] Adapted from Schall and Shapiro (1989), "Rhetorical Rules and Organization Culture: Identification, Maintenance, and Change."

2. What intellectual posture is most likely to influence these people (that is, what sort of posture will they respond to most favorably)? Idealistic? Pragmatic? Analytic? Realistic? Conceptual? How is that posture translated into behavior.

The Vice President of Finance responds to a logical process, rational arguments, and strategic thinking. His behavior is to look at how a decision was reached. The postures likely to influence the Senior Vice President or the Vice President of Human Resources seem to change. The President is said to be influenced by practical, straight talk, and if he accepts an idea, he will act on it.

One pitfall in talking to several influential people was that the posture to which they would respond changed. At one point, it was most influential to talk about the company's present opportunities/needs. But if the discussion got specific, then the decision maker would change the framework to the future. At another point, the decision maker would change the discussion from the future to the present, again if the discussion got specific.

The same pitfall applied to new products and processes for the company. For example, it was appropriate to talk generally about new products and processes and how important they were for Money Systems Company. But, if the discussion got specific, several decision makers were likely to say that there would be no new products.

3. What personal style is most likely to influence them: Dramatic? Unemotional? Inspirational? Caring? Humorous? Assertive?

It is difficult to know which personal style is most likely to influence the decision makers, but an unemotional style seems more likely to achieve success. The use of humor also seems to be effective with the President and the Vice President of Finance.

4. What channel is most likely to convey the message in a way that will be influential? Face-to-face informal meetings? Formal meetings? Telephone? Written memo? Written report? Through another person? (If so, who and why?)

The most influential communication channel is face-to-face informal meetings. In the past history of the company, the way that most business was done was face to face. However, even in face-to-face meetings, people did not know if they were being heard by the top people in the company because there was often a noncommmittal response.

5. Considering all the above, what are the rhetorical (rules) for various groups.

1. It is difficult to know how to get your message heard in this organization because there seem to be a number of changing rules and there are no clear signals about when you are heard.

2. Those inside the organization are more likely to be heard than those outside the organization (with the exception of Prine, Inc.).

3. Insiders who use face-to-face communication are more likely to be heard than those who use written language.

4. The ballpark that you're playing in can change with less than a moment's notice from the company's present to the company's future, from current work to new products. The only way to know that the ballpark has changed is to be told that you're in the wrong ballpark.

Insider's Rules

- **What did the last 10 people promoted in the organization have in common? What are the shared understandings about why they were so rewarded?**

The people who have been promoted during the reorganizations had both tenure and ability and could therefore help the company move in new directions.

- **What are the *should* statements in the organization, and why? ("Why is it that I/she/he should do that?")**

One group of *should* statements focused on what a person should do before acting. For example, "Check with me before you act," "Send a letter before you act," "Wait until the timing is right and then act." A person can avoid "getting in trouble" by not acting or waiting for the "blessing."

Another group of *should* statements focused on planning. For example, "We should plan better because the company loses money when we don't plan".

- **What excuses or justifications are given for behavior?**

One common-excuse was "I'm sorry that I was late for the meeting, but I was doing something for [Prine, sales, or my department]". This excuse highlighted the following two unspoken rules at Money Systems Company:

Rule 1: Being on time for meetings is important at Money Systems Company.

Rule 2: Meeting the needs of Prine, Inc.; sales; or the department sometimes had a higher priority than being on time for meetings.

Another common excuse was "Sorry, but the people upstairs have (a) stopped the project, (b) changed the priority again, or (c) restarted the project. I don't know why."

Rule 1: Finishing a started project is important at Money Systems Company.

Rule 2: Senior management has the power to stop or start projects whenever they want.

The underlying values or beliefs are that (a) Senior managers control the work rather than support the work of those who report to them; (b) the decisions of senior management carry more weight than the decisions or work of others in the organization, and (c) the cost of changing decisions after action is taken is not expensive.

- **According to the gossip, what kinds of influence behaviors are applauded, condoned, or despised?**

According to the gossip, the pattern by which some senior managers are influenced has not been identified. This is because senior managers are viewed as making decisions based on intuition. People have difficulty in knowing how to influence the intuition of the decisions maker. Although one person said that credibility is based on verifiable information and facts and that some people try to have influence based on what they think Prine, Inc., wants, it is not clear about whether these behaviors are acceptable, condoned, despised, or if they even work.

- **Whose ideas are accepted or rejected in the organization and why? Who allies with whom and why? Who and what is focused on? Ignored? Why?**

The president's ideas are accepted because of his role in the company. Some of the Vice President of Finance's ideas are accepted because he has numbers and dates, has worked with the President in the past, supports the President, and has connections at Prine, Inc.. The previous Vice President of Marketing's ideas were rejected. One coalition is the President and the Vice President of Finance. The Senior Vice President and the Manager of Operations make up another coalition. There is an internal power struggle at Money Systems Company, and acceptable ideas seem to be those that help senior managers in this power struggle.

- **What is the moral of the stories that circulate about influential people or events in the organization?**

One moral of the stories is that behavior at Money Systems Company has a pattern of start, stop, change, and start again. Another moral is that components of projects do not fit together. A third moral is how things used to be done.

- **What marks someone's passage from an outsider to an insider in the organization?**

The insiders are the people with information. Insiders have access to the eighth floor and to certain meetings. Exactly how this passage occurs is not clear.

- **How does the workplace look?**

The corporate building is an attractive, modern granite-and-glass structure. From the outside, the impression is one of stability,and security. One also gets the impression that the building was well thought out. Inside, the impression is one of glass and stone. Another impression is that there are compartments of security. There are a number of locked doors that require security access. There is also the impression of wealth. The offices and hallways are richly decorated and contain a mix of art and decorating styles with lots of green plants. The operations area looks serviceable. There are few books and little in the way of posted calendars, production charts and so on.

- **At budget allocation times, what arguments by whom win funding?**

According to one person who reviews the budgets, the arguments that win funding are made in a logical way tailored to what Prine, Inc., will buy. This person noted that many managers at Money Systems Company do not know how to design and present such arguments.

Phase 1

Step 2. Determine the purpose and parameters of the analysis.

- Step 2a. Use the following chart to identify the salient characteristics of the decision maker, the analyst, and the organization and to record summary notes.

yes	no	characteristics	summary notes
✓		**Organization** Organization culture: climate for training; support for the training function; history of training in the organization; location of the training function in the organization; organization goals, organization philosophy, emphasis, and objective; values promoted by the organization; amount of consensus/conflict within the organization; legal, social, economic, and political factors inside and outside the organization.	• Climate for training depends on who the decision maker is. • There is not much support for the training function (i.e., training department has been virtually eliminated). • History of training department —it was started 5 years ago and is located in the HR department and has had three managers. • Organization philosophy, and objectives are not clear, even to top managment (develop a new product and hire a 1,000 people or survive). • Values promoted by the organization include family atmosphere where it is acceptable to be late with work, and good old boy network and some conflicting values. • Amount of consensus never clear because espoused consensus is not the same as real consensus. • Changes external to the organization, regulatory changes and technologocial changes, and banking competition changes. • Internally, two regorangizations (a changing of the guard) in the last year have left the organization reeling, and there is a lot of political infighting to control the process and to blame someone else for problems. For example, one story going around was that "In the field, they sit around and drink coffee all day." The implication is that its not my fault and that the problem is with the people. The organization's products are described in words that are not always understood by the lay-person, and some products are not concrete. For example, the name for the company's new product is an oxymoron.

Phase 1 (Step 2a continued)		
yes	**no**	**characteristics summary notes**
✓		Reward structure • Depends on location in company; family type of rewards are important for many in the company, bonuses, get to keep job. • Intrinsic rewards of doing a job well seem to be important in the financial area, but was not evident throughout the company. Some people expressed the idea that it is a place to work. • There are few consequences for not getting work done. • Attacking and defending internal territory is rewarding to many.
✓		Political factors surrounding the situation • Not knowing who has the power makes for a political situation. Knowing who has the power doesn't always give clues about what will happen. Political factors seem to abound in the sales area and in dealing with new processes. Each person has his or her own message, and each decision maker has his or her own criteria so it is hard to be heard. • The company is rumored to be a good old boys network with unequal compensation for women in some positions.
✓		The organization's internal and external environment • Externally, the interaction of changing technology, changing customer needs, changing competitors, and changing regulations makes this a volatile situation. • Internally, there is little trust, few coalitions, little excitement about the work. Also, territoritality makes it difficult to get information related to performance. There is a lot of information. There are pockets of analysts putting out information, but it is not all connected, and accuracy of information is not verified.
	✓	Broader program of which training is an element • None.

	✓	Supporting systems such as the selection, human factors, engineering, and work procedures • Not a factor.
✓		Terminology and language used in the organization • Products names are jargon, product is not concrete, or easily visible. • Fnancial services company, control, and operations are words that have meaning in the company.
	✓	Other

Phase 1 (Step 2a continued)

yes	no	characteristics	summary notes
✓		**Analyst** Internal/external consultant • External.	
✓		Biases, attitudes, beliefs and values • Bottom-line, people and performance.	
✓		Skill level • Skilled--experienced.	
✓		Type of power • Cooperative, expert.	
✓		Style and experience of the analyst • Work with client, experienced in needs analysis and organization change.	
	✓	Other	
✓		**Decision makers** Expectations of the decision makers • Inconsistent; what Manager of Training expected did not meet at all the expectations of the VPHR, which did not meet the needs of the HR customer , and may or may not have met the needs of the President. Consequently, it is hard to be heard and hard to get information. Decision makers can be unclear and inconsistent. There is no direct route to the President.	
✓		Amount of support for training • There is little support for training to change performance. Fun experiences, not rocking the boat, count for more in this company than performance.	
✓		Amount of consensus among decision makers • Little. For example, a common saying is, "I'm not sure that ___ has the skills we need for that position" (fill in the executive's name).	
✓		Style and experience of the decision maker • Decision makers are intelligent and savy street fighters. Good old boys network, don't rock the boat, • VPF--takes reasonable risks, knows he doesn't have all the answers, and wants to change his performance. • President--nobody knows for sure.	
✓		Skill level of the decision makers • Behind closed doors, decision makers say that top management's lack of the skills in making decisions and managing a complex company is hurting MSC.	

Phase 1 (Step 2a continued)			
yes	no	characteristics	summary notes
✓		The level of the decision makers position in the organization • VP	
	✓	Other	

Appendix O

PAT Model Evaluation Questions

You are being asked to evaluate the effectiveness of the PAT Model for determining training needs in an organization. To make this decision, I have enclosed the documentation related to the implementation of the PAT Model in an organization. This documentation includes the initial proposal, the final report for the project, the completed PAT worksheets, and a description of the process used to implement the PAT Model.

Please answer the following questions:

1. How useful was the PAT Model in determining the training needs in this case?

not useful		neutral		useful
1	2	3	4	5

2. How appropriate were the results from the PAT Model in this case?

not appropriate		neutral		appropriate
1	2	3	4	5

3. How much was the perception and prioritization of training needs in the organization influenced by the characteristics of the organization, the decision makers, and the analyst?

not influenced		neutral		significantly influenced
1	2	3	4	5

4. How well did the phases and steps of the PAT Model work together in this case?

not well		neutral		very well
1	2	3	4	5

5. How favorably does the PAT Model compare with other needs assessment models?

not favorable		neutral		very favorable
1	2	3	4	5

6. What additional comments do you have about the PAT Model?